IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK

SONTERRA CAPITAL MASTER FUND, LTD., HAYMAN CAPITAL MANAGEMENT, L.P., and CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM on behalf of themselves and all others similarly situated,

Plaintiffs,

- against -

UBS AG, UBS SECURITIES JAPAN CO. LTD., MIZUHO BANK, LTD., THE BANK OF TOKYO-MITSUBISHI UFJ, LTD., THE SUMITOMO TRUST AND BANKING CO., LTD., THE NORINCHUKIN BANK, MITSUBISHI UFJ TRUST AND BANKING CORPORATION, SUMITOMO MITSUI BANKING CORPORATION, RESONA BANK, LTD., J.P. MORGAN CHASE & CO., JPMORGAN CHASE BANK, NATIONAL ASSOCIATION, J.P. MORGAN SECURITIES PLC, MIZUHO CORPORATE BANK, LTD., DEUTSCHE BANK AG, DB GROUP SERVICES UK LIMITED, MIZUHO TRUST AND BANKING CO., LTD., THE SHOKO CHUKIN BANK, LTD., SHINKIN CENTRAL BANK, THE BANK OF YOKOHAMA, LTD., SOCIÉTÉ GÉNÉRALE SA, THE ROYAL BANK OF SCOTLAND GROUP PLC, THE ROYAL BANK OF SCOTLAND PLC, RBS SECURITIES JAPAN LIMITED, RBS SECURITIES INC., BARCLAYS BANK PLC, BARCLAYS PLC, BARCLAYS CAPITAL INC., CITIBANK, NA, CITIGROUP, INC., CITIBANK, JAPAN LTD., CITIGROUP GLOBAL MARKETS JAPAN, INC., COÖPERATIEVE CENTRALE RAIFFEISEN-BOERENLEENBANK B.A., HSBC HOLDINGS PLC, HSBC BANK PLC, LLOYDS BANKING GROUP PLC, LLOYDS BANK PLC, ICAP PLC, ICAP EUROPE LIMITED, R.P. MARTIN HOLDINGS LIMITED, MARTIN BROKERS (UK) LTD., TULLETT PREBON PLC, BANK OF AMERICA CORPORATION, BANK OF AMERICA, N.A., MERRILL LYNCH INTERNATIONAL, AND JOHN DOE NOS. 1-50,

Defendants.

Docket No. 15-cv-5844

ECF Case

AMENDED CLASS
ACTION COMPLAINT

JURY TRIAL DEMANDED

TABLE OF CONTENTS

INTR	ODU	UCTION	1
JURI	SDIC	CTION AND VENUE	18
PAR'	ΓIES		19
PERS	SON	AL JURISDICTION	47
AGE	NTS	AND UNNAMED CO-CONSPIRATORS	60
SUB	STA	NTIVE ALLEGATIONS	60
I.	Ba	ckground	60
	A.	Euroyen TIBOR and Yen-LIBOR	60
	В.	Euroyen-Based Derivatives	63
		1. Interest Rate Swaps and Options on Interest Rate Swaps	63
		2. Forward Rate Agreement	65
		3. Foreign Exchange Forwards	65
II.	Pr	efendants Restrained Trade and Intentionally Manipulated Euroyen-Based Derivative ices By Falsely Reporting Euroyen TIBOR and Yen-LIBOR Rates to the JBA and BA	
III.		efendants Restrained Trade and Manipulated the Prices of Euroyen-Based Derivative Their Illegitimate, Non-Bona Fide Trading of Euroyen-Based Derivatives	
IV.	Cr	efendants' Unlawful Conduct Has Led to Deferred Criminal Prosecution Agreements iminal Charges, Guilty Pleas and Settlements Resulting in the Payment of Fines and nalties in Excess of \$7 Billion to Governmental Authorities in the U.S. and Abroad	
	A.	Defendants Created an Environment Ripe For the Pervasive and Persistent Manipulation of Yen-LIBOR, Euroyen TIBOR and the Prices of Euroyen-Based Derivatives	71
		The Contributor Bank Defendants Created Inherent Conflicts of Interest that Corrupted their Yen-LIBOR and Euroyen TIBOR Submission Process and Facilitated Their Unlawful Manipulation and Collusion	71
		 Defendants Permitted Traders – Whose Compensation Was Directly Linked Their Success in Trading Euroyen-Based Derivatives – To Improperly Influence Their Yen-LIBOR and Euroyen TIBOR Submissions. 	
		i. UBS	71
		ii. RBS	73

			iii. Rabobank	76
			iv. Lloyds	80
			v. Deutsche Bank	81
	2.	LI	efendants Lacked Internal Controls To Oversee Their Involvement in the Yen BOR and Euroyen TIBOR Submission Process and To Monitor Their	
			ommunications With Other Banks and Brokers	
			ICAP.	
		b.	R.P. Martin.	86
		c.	Deutsche Bank	87
		d.	UBS	89
	3.	Pa: Eu	rticipants in the Pervasive and Persistent Manipulation of Yen-LIBOR, proyen TIBOR and Euroyen-Based Derivatives Prices by Their Traders,	
			bmitters and Brokers	
			UBS	
			RBS.	
			Rabobank.	
		d.	Lloyds.	96
		e.	Deutsche Bank	96
В.			dants Successfully Manipulated Yen-LIBOR, Euroyen TIBOR, and the Price oyen-Based Derivatives.	
	1.	Ot	arough Their False Reporting of Yen-LIBOR and Euroyen TIBOR, Among ther Unlawful Conduct, the Contributor Bank and Broker Defendants accessfully Manipulated Yen-LIBOR, Euroyen TIBOR, and the Prices of	
			proyen-Based Derivatives.	98
		a.	UBS	98
			 i. UBS Continued Its Manipulation of Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives after Hayes Left UBS for Defendant Citibank Japan. 	07
		h	RBS	
		c.	Rabobank	
		d.	Barclays	
			·	32
		€.	LIVYU3 I	. 1 /.

		f. I	Deutsche Bank	2
	2.		ndants Exploited the LIBOR Fixing to Maximize the Impact of their False LIBOR Submissions	4
C.	Su	ccessf	tributor Bank Defendants Colluded With the Broker Defendants to fully Manipulate Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-erivatives.	7
	1.		Colluded With the Broker Defendants to Manipulate Yen-LIBOR, Euroyen DR, and the Prices of Euroyen-Based Derivatives	
		a. "	Suggested LIBORs"	3
		i.	ICAP Brokers Provided Critical Assistance by Disseminating False and Misleading "Suggested LIBORs"	4
		ii	BBA Guidelines Expressly Prohibited the Contributor Bank Defendants From Relying on Inter-Dealer Brokers' Market Color When Making Yen- LIBOR Submissions	
		b. P	Publishing False Market Rates to Panel Banks on Broker Screens	0
		c. "	Spoofing": Publication of False Bids and Offers	2
	2.		Broker Defendants Were Active Co-Conspirators with the Contributor Bank ndants	
	3.		Contributor Bank Defendants Knew the Broker Defendants Were Actively ng and Abetting the Manipulation of Yen-LIBOR159	9
D.	Fo As	rm of sistan	ker Defendants Reaped Commissions, Bonuses and Accepted Bribes in the Wash Trades from the Contributor Bank Defendants for Their Critical ce in the Manipulation of Yen-LIBOR, Euroyen TIBOR, and the Prices of Based Derivatives	0
	1.	Extra	a Trades to Generate Unearned Commissions	1
	2.	Gifts	and Other Bribes	1
	3.	"Was	sh" Trades to Generate Illegitimate Commissions	3
	4.	UBS	Paid a Special "Bonus" To Broker Defendant ICAP	7
E.			ak Colluded with Broker Defendants ICAP and R.P. Martin to Manipulate SOR to Benefit Rabobank's Euroyen-Based Derivatives Positions	2
	1.		bbank Colluded with Broker Defendant R.P. Martin to Aid UBS' ipulation	3
F.			nipulated Yen-LIBOR through Brokers and Engaged in Wash Trades to sate the Broker Defendants for Their Assistance	4

G.			ces of Euroyen-based Derivatives	177
Н.	R.P. M	artin Provide	roker Trial, and Settlement Cooperation Produced to Plaintifued New Information Regarding the Scope and Inner-Working the Defendants' and Broker Defendants' Conspiracy	gs of
			T,	
		iii. JPMorga	an	185
			ukin	
		v. Raboban	ık	192
		vi. Société (Générale	194
		vii. Mizuho l	Bank	196
		viii. Deutsch	ne Bank	197
		ix. Lloyds		199
		x. Merrill L	Lynch	200
		xi. Bank of	Tokyo-Mitsubishi	202
	b.	ICAP		203
	c.	Tullett Prebo	on	206
			Prebon Management Directed Brokers to Engage in More Wa	
			Brokers Coordinated False Yen-LIBOR Submissions Among Contributor Bank Defendants	•
I.	Manip	ılate Yen-LII	nk Defendants Colluded Directly with One Another To BOR, Euroyen TIBOR, and the Prices of Euroyen-Based	214
	1. UI	S' Collusion	with Other Panel Banks	214
			OJ Deferred Prosecution Agreement, RBS Admitted To Col	_
			DOJ Deferred Prosecution Agreements, Rabobank and Llog That They Had a Standing Agreement to Collude	•
			Regularly Colluded With Contributor Bank Defendants	

iv

	5.	5. HSBC was a key member of the Conspiracy		
	6.		tibank Joined the Conspiracy Manipulate Yen-LIBOR, Euroyen TIBOR, and Prices of Euroyen-Based Derivatives	
	7.		rrently Known Long-Term Campaigns to Manipulate Yen-LIBOR, Euroyen BOR and the Prices of Euroyen Based Derivatives	255
		a.	The January to May 2007 Campaign: Defendants Coordinated the Manipulation of Three-Month Yen-LIBOR	255
			i. Phase One2	256
			ii. Phase Two: lower three-month Yen-LIBOR during April 2007 and May 2007	
		b.	Summer 2009: The "Turn Campaign" and "Operation 6M"	261
			iii. The Turn Campaign	261
			iv. Operation 6M	269
J.	De	feno	ontributor Bank and Broker Defendants Knew That Other Contributor Bank dants Were Manipulating Yen-LIBOR, Euroyen TIBOR and the Prices of en-Based Derivatives.	276
K.	Kn Eu	As Sophisticated Market Participants, the Contributor Bank and Broker Defendants Knew Their Manipulation of Yen-LIBOR, Euroyen TIBOR and the Prices of Euroyen-Based Derivatives Would Have (And Did Have) Adverse Financial Consequences on Other Euroyen-Based Derivatives Market Participants		
L.	Defendants Agreed to and Did Fix the Bid-Ask Spread on OTC Euroyen-Based Derivatives, Overcharging Class Members for Purchases and Underpaying Class Members for Sales of Such Derivatives			281
M.		_	ning in at Least 2009, the Euroyen TIBOR Contributor Bank Defendants ired to Manipulate Euroyen TIBOR Higher Than Yen-LIBOR	282
N.	Qu	esti	dants Concocted False Stories They Could Give in the Event Someone oned Their Manipulation of Yen-LIBOR, Euroyen TIBOR, and the Prices of en-Based Derivatives	
	1.	RE	3S	284
	2.	De	utsche Bank2	285
	3.	Ra	bobank2	290
O.			dants Used Code Words to Conceal Their Manipulation of Yen-LIBOR, en TIBOR, and the Prices of Euroyen-Based Derivatives	292

	1.	ICAP Yen Brokers Used Code Words and Personal Cell Phones To Try and Conceal Their Yen-LIBOR Services
	2.	R.P. Martin Brokers and Hayes Attempted to Conceal Their Improper Conduct Surrounding the Wash Trades
P.	Inv Ma	ter the Contributor Bank Defendants Were Placed on Notice of Government vestigations into the Manipulation of U.S. Dollar LIBOR, Defendants Continued to anipulate Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based rivatives
Q.		fendants Obstructed Government Investigations and Lied to Their Attorneys ring Their Own Internal Investigations of LIBOR Manipulation
R.	Lea	gal Findings and Implications of Defendants' Manipulative and Collusive Conduct 297
	1.	The CFTC Determined Yen-LIBOR and Euroyen TIBOR are Each a Commodity in Interstate Commerce
	2.	As Part of its Non-Prosecution Agreement with the DOJ, UBS Admits That False and Misleading Yen-LIBOR and Euroyen TIBOR Contributions Affected or Tended to Affect the Price of Commodities, Including Futures Contracts 300
	3.	Defendants Admit They Successfully Manipulated Yen-LIBOR and/or Euroyen TIBOR
	4.	The CFTC Has Determined That Contributor Bank Defendants UBS, RBS, Rabobank, Deutsche Bank, Barclays, and Lloyds Successfully Manipulated Yen-LIBOR
	5.	The CFTC Has Determined that Broker Defendants ICAP and R.P. Martin Successfully Manipulated Yen-LIBOR
	6.	The CFTC Has Determined that Contributor Bank Defendants UBS, RBS, Rabobank, Deutsche Bank, and Lloyds Aided and Abetted the Manipulation of Yen-LIBOR
	7.	The CFTC Has Determined that Broker Defendants ICAP and R.P. Martin Aided and Abetted the Manipulation of Yen-LIBOR
	8.	The CFTC Has Determined Contributor Bank Defendants UBS, RBS, Rabobank, Lloyds, ICAP, R.P. Martin, Deutsche Bank, and Barclays Are Vicariously Liable for the Acts of their Employees in the Manipulation of Yen-LIBOR
	9.	Contributor Bank Defendants UBS, RBS, Rabobank, Lloyds, Deutsche Bank, and Barclays Acknowledge Same in their Non-Prosecution and Deferred Prosecution Agreements with the DOJ

		10. Contributor Bank Defendants UBS, RBS, Rabobank, Deutsche Bank, and Barclays Admit They Engaged in a Deceptive Course of Conduct When They Submitted or Caused to Be Submitted False and Misleading Yen-LIBOR and Euroyen TIBOR Submissions Designed to Derive Illicit Profits at the Expense Their Counterparties and other Euroyen-Based Derivatives Participants	
		11. Defendants Admit They Were Competitors.	306
	S.	Defendants Plead Guilty or Agree to Waive Indictment to Criminal Charges of Wi Fraud in Connection with Their Manipulation of the Prices of Euroyen-Based Derivatives.	
		1. UBS Japan	
		2. RBS Japan.	
		3. Rabobank.	
		4. Deutsche Bank	
		 Recently, UBS Waived Indictment and Pled Guilty After the DOJ Revoked a Non-Prosecution Agreement Based on UBS' Continued Market Manipulation Serial Criminal Conduct 	and
	T.	Defendants Former Traders and Brokers Have Been Criminally Charged with an Antitrust Violation, Wire Fraud and Conspiracy to Defraud Charges in the U.S. an U.K.	
		Former UBS and Citibank Yen Trader Thomas Hayes and Former UBS Yen Trader Roger Darin	311
		2. Former ICAP Brokers.	314
		3. Former R.P. Martin Brokers Terry John Farr and James Andrew Gilmour	314
		4. Former Rabobank Traders.	315
V.	Mi	Fendants' Unlawful Conduct Has Also Led to Investigations, Issuance Of Findings sconduct and Administrative Sanctions With Governmental Authorities in the U.S. road315	
	A.	Recommendations and Findings by the Japanese Securities and Exchange Surveillance Commission and Administrative Action by the Japanese Financial Services Agency	315
		1. UBS	
		2. Citigroup/Citibank	
		3. RBS	
	В	Swiss Competition Commission Investigation	
	٠.		

	C.	Disclosures Confirm the Existence of Investigations, Disclose Additional Investigations and/or Efforts to Reach Potential Settlements with Regulators	. 324
	D.	Dozens of Defendants' Employees Are Under Investigation and/or Have Resigned Been Suspended, or Fired or Arrested	
		1. RBS	. 326
		2. Citibank/Citigroup	. 327
		3. UBS	328
		4. JPMorgan Chase	329
		5. Deutsche Bank	329
		6. HSBC	330
		7. Barclays	330
		8. Bank of Tokyo-Mitsubishi UFJ/Mitsubishi UFJ Financial Group	330
		9. Rabobank	331
		10. R.P. Martin	331
		11. ICAP	331
		12. Tullett Prebon	331
	E.	The BBA's and JBA's Re-Evaluation of Rate-Setting Process	. 332
VI.		Dramatic Decrease in Variability Between the Quotes Among All Reporting ontributor Bank Defendants Evidences Collusion During The Class Period	. 334
VII.		nintiffs' Economic Analyses Show That Yen-LIBOR Impacted Euroyen TIBOR rring the Class Period	. 351
VIII.		dependent Analyses Demonstrate That Euroyen TIBOR and Yen-LIBOR Were tificial During The Class Period	. 356
	A.	Euroyen TIBOR and Yen-LIBOR Diverged Dramatically From their Historical Relationship with the Euroyen Deposit Rate	. 356
	В.	Analyses of the Defendant Banks' Euroyen TIBOR and/or Yen-LIBOR Quotes Submitted During the Class Period, as Compared to the then Prevailing EYDR, Further Demonstrates Artificiality	. 363
		1. Euroyen TIBOR	363
		2. Yen-LIBOR	. 375
	C.	During the Class Period, Euroyen TIBOR and Yen-LIBOR Diverged Dramatically From their Historical Relationship with Each Other	-

	D.	Euroyen TIBOR Quotes than Yen-LIBOR	388
	E.	The Difference Between Defendants' Reported Yen-LIBOR Quotes and their CDS Spreads Strongly Supports Yen-LIBOR Artificiality	
IX.	Pri	ring the Class Period, Plaintiffs Transacted in Euroyen-Based Derivatives at Artificates Proximately Resulting From Defendants' Manipulation and False Reporting of royen TIBOR and Yen-LIBOR	
	A.	Plaintiff Sonterra	395
	B.	Plaintiff Hayman	396
	C.	Plaintiff CalSTRS	400
	D.	Plaintiffs CalSTRS, Hayman & Sonterra	404
X.		fendants Engaged in a Conspiracy in Restraint of Trade by Collusively Fixing the ce of Euroyen-Based Derivatives.	405
	A.	Direct Evidence Reveals and Factual Admissions Confirm That Defendants, Including UBS, RBS, Rabobank, Deutsche, JPMorgan, Lloyds, Citigroup, ICAP ar R.P. Martin Conspired To Fix the Price of Euroyen-Based Derivatives	
	B.	The Conspiracy to Fix The Prices of Euroyen-Based Derivatives Constituted an Agreement in Restraint of Trade	407
	C.	The Conspirators Were Horizontal Competitors In Euroyen-Based Derivatives	408
	D.	The Collusive Conduct Fixed Prices and Restrained Trade or Changed Output	408
	E.	The Government Settlements to Date Reveal a High Number of Inter-Firm Communications	410
	F.	Specifically Citing Antitrust Concerns, the JBA Euroyen TIBOR Publication Rules Explicitly Proscribe Advance Information Exchange and Coordination Among Rate Setting Banks.	e-
CLAS	S A	CTION ALLEGATIONS	411
TOLL	ING	S AND FRAUDULENT CONCEALMENT	413
	A.	Dates of Initial Public Disclosures	414
	B.	Plaintiffs' Due Diligence Efforts	416
	C.	Government Proceeding Antitrust Tolling	423
CLAIN	MS l	FOR RELIEF	426
FIRST	CL	AIM FOR RELIEF	426
SECO	ND	CLAIM FOR RELIFE	127

Case 1:15-cv-05844-GBD-HBP Document 121 Filed 12/18/15 Page 11 of 363

THIRD CLAIM FOR RELIEF	. 429
FOURTH CLAIM FOR RELIEF	. 431
FIFTH CLAIM FOR RELIEF	
SIXTH CLAIM FOR RELIEF	
SEVENTH CLAIM FOR RELIEF	
PRAYER FOR RELIEF	
DEMAND FOR A JURY TRIAL	. 451

TABLE OF EXHIBITS

Exhibit ("Ex.") Reference	Description
Ex. A-1	United States Department of Justice, Criminal
	Division, Fraud Section Non-Prosecution
	Agreement and Appendix A Statement of Facts
	with UBS AG (Dec. 18, 2012)
Ex. A-2	Commodity Futures Trading Commission
	Order Instituting Proceedings Pursuant to
	Sections 6(c) and 6(d) of the Commodity
	Exchange Act Making Findings and Imposing
	Remedial Sanctions against UBS AG and UBS
	Securities Japan Co., Ltd., CFTC Docket No.
	13-09 (Dec. 19, 2012)
Ex. A-3	Financial Services Authority Final Notice
	against UBS AG, FSA Ref. No. 186958 (Dec.
	19, 2012)
Ex. A-4	United States Department of Justice, Criminal
	Division, Fraud Section Criminal Information
	against UBS Securities Japan Co., Ltd. 12-cr-
	00268 (Dec. 19, 2012)
Ex. A-5	United States Department of Justice, Criminal
	Division, Fraud Section Plea Agreement with
	UBS Securities Japan Co., Ltd. 12-cr-00268
	(Dec. 19, 2012)
Ex. A-6	United States Department of Justice, Criminal
	Division, Fraud Section and Antitrust Division
	Criminal Complaint against Tom Alexander
	William Hayes and Roger Darin, 12-mag-
T. 4.5	03229 (S.D.N.Y. Dec. 12, 2012)
Ex. A-7	United States Department of Justice, Criminal
	Division, Fraud Section Plea Agreement with
	UBS AG, 15-cr-00076 (D. Conn. May 20,
F D 1	2015)
Ex. B-1	United States Department of Justice, Criminal
	Division, Fraud Section, and Antitrust Division
	Deferred Prosecution Agreement and
	Attachment A Statement of Facts with The
E D 2	Royal Bank of Scotland plc, (Feb. 6, 2013)
Ex. B-2	United States Department of Justice, Criminal
	Division, Fraud Section and Antitrust Division
	Plea Agreement and Statement of Facts with
	the RBS Securities Japan Limited (Apr. 12,
E D 2	2013) United States Department of Justice Fraud
Ex. B-3	United States Department of Justice, Fraud
	Section, Criminal Division and Antitrust

	Division Criminal Information against RBS Securities Japan Limited (Apr. 12, 2013)
Ex. B-4	Commodity Futures Trading Commission Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, Making Findings and Imposing Remedial Sanctions against The Royal Bank of Scotland plc and RBS Securities Japan Limited, CFTC Docket No. 13-14 (February 6, 2013)
Ex. B-5	Financial Services Authority Final Notice against The Royal Bank of Scotland plc, FSA Ref. No. 121882 (Feb. 6, 2013)
Ex. C-1	Commodity Futures Trading Commission Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, Making Findings and Imposing Remedial Sanctions against ICAP Europe Limited, CFTC Docket No. 13-38 (Sept. 25, 2013)
Ex. C-2	Financial Conduct Authority Final Notice against ICAP Europe Ltd., FCA Ref. No. 188984 (Sept. 25, 2013)
Ex. C-3	United States Department of Justice, Criminal Division, Fraud Section, and Antitrust Division Criminal Complaint against Darrell Read, Daniel Wilkinson, and Colin Goodman, 13-mag-2224 (S.D.N.Y. Sept. 13, 2013)
Ex. C-4	The European Commission Press Release, "Antitrust: Commission fines broker ICAP € 14.9 million for participation in several cartels in Yen interest rate derivatives sector," IP/15/4104 & Memo/13/1090 (Feb. 4, 2015)
Ex. D-1	United States Department of Justice, Criminal Division, Fraud Section and Antitrust Division Deferred Prosecution Agreement and Attachment A Statement of Facts with Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A. (Oct. 29, 2013)
Ex. D-2	Commodity Futures Trading Commission Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, Making Findings and Imposing Remedial Sanctions against Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A., CFTC Docket No. 14-02 (Oct. 29, 2013)

Ex. D-3	Financial Conduct Authority Final Notice against Coöperatieve Centrale Raiffeisen- Boerenleenbank B.A., FCA Ref. No. 171596 (Oct. 29, 2013)
Ex. D-4	United States Department of Justice, Criminal Division, Fraud Section, and Antitrust Division Criminal Information against Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A. (Oct. 29, 2013)
Ex. D-5	United States Department of Justice Criminal Division, Fraud Section, and Antitrust Division Criminal Complaint against Paul Robson, Paul Thompson, and Tetsuya Motomura, 14-mag-0069 (S.D.N.Y. Jan. 13, 2014)
Ex. D-6	United States Department of Justice, Criminal Division, Fraud Section, and Antitrust Division Superseding Information against Takayuki Yagami, 14-cr-00272 (S.D.N.Y. June 10, 2014)
Ex. D-7	United States Department of Justice, Criminal Division, Fraud Section and Antitrust Division Criminal Indictment against Paul Robson, Paul Thompson, and Tetsuya Motomura, 14-cr-272 (S.D.N.Y. Apr. 28, 2014)
Ex. D-8	United States Department of Justice, Criminal Division, Fraud Section and Antitrust Division Superseding Indictment against Anthony Allen, Paul Thompson, Tetsuya Motomura, and Anthony Conti, 14-cr-272 (S.D.N.Y. Oct. 16, 2014)
Ex. E-1	Commodity Futures Trading Commission Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, Making Findings and Imposing Remedial Sanctions against RP Martin Holdings Limited and Martin Brokers (UK) Ltd., CFTC Docket No. 14-16 (May 15, 2014)
Ex. E-2	Financial Conduct Authority Final Notice against Martin Brokers (UK) Ltd., FCA Ref. No. 187916 (May 15, 2014)
Ex. F-1	The European Commission Press Release, "Antitrust: Commission fines banks €1.71 billion for participating in cartels in the interest rate derivatives industry," IP/13/120 & Memo/13/1090 (Dec. 4, 2013)
Ex. G-1	United States Department of Justice, Criminal

	Division, Fraud Section, and Antitrust Division Non-Prosecution Agreement and Appendix A Statement of Facts with Barclays Bank PLC (June 26, 2012)
Ex. G-2	Commodity Futures Trading Commission Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, As Amended, Making Findings and Imposing Remedial Sanctions against Barclays PLC, Barclays Bank PLC and Barclays Capital, Inc. CFTC Docket No. 12-25 (June 27, 2012)
Ex. G-3	Financial Services Authority Final Notice against Barclays Bank PLC, FSA Ref. No. 122702 (June 27, 2012)
Ex. H-1	United States Department of Justice, Criminal Division, Fraud Section, and Antitrust Division Deferred Prosecution Agreement and Appendix A Statement of Facts with Lloyds Banking Group plc (July 28, 2014)
Ex. H-2	Commodity Futures Trading Commission Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, As Amended, Making Findings and Imposing Remedial Sanctions against Lloyds Banking Group plc and Lloyds Bank plc (July 28, 2014)
Ex. H-3	Financial Conduct Authority Final Notice against Lloyds Bank plc and Bank of Scotland plc (July 28, 2014)
Ex. H-4	United States Department of Justice, Criminal Division, Fraud Section, and Antitrust Division Criminal Information against Lloyds Banking Group PLC (Jul. 28, 2014)
Ex. I-1	United States Department of Justice, Criminal Division, Fraud Section, and Antitrust Division Deferred Prosecution Agreement and Appendix A Statement of Facts with Deutsche Bank AG (Apr. 23, 2015)
Ex. I-2	Commodity Futures Trading Commission Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, As Amended, Making Findings and Imposing Remedial Sanctions against Deutsche Bank AG (Apr. 23, 2015)
Ex. I-3	Financial Conduct Authority Final Notice

Case 1:15-cv-05844-GBD-HBP Document 121 Filed 12/18/15 Page 16 of 363

	against Deutsche Bank AG (Apr. 23, 2015)
Ex. I-5	New York State Department of Financial
	Services Consent Order Under New York
	Banking Law §§ 44 and 44-a against Deutsche
	Bank AG and Deutsche Bank AG, New York
	Branch (Apr. 23, 2015)
Ex. I-6	The Federal Financial Supervisory Authority,
	BaFin, Audit report for the IBOR special audit
	by Ernst & Young against Deutsche Bank AG
	(May 11, 2015)
Ex. I-7	United States Department of Justice, Criminal
	Division, Fraud Section, and Antitrust Division
	Criminal Information against Deutsche Bank
	A.G. (Apr. 23, 2015)

Plaintiffs Sonterra Capital Master Fund, Ltd., Hayman Capital Management, L.P., and the California State Teachers' Retirement System ("CalSTRS") (collectively, "Plaintiffs") complain, upon knowledge as to themselves and their own acts, and upon information and belief as to all other matters, against Defendants (defined in ¶¶ 58-148), as follows:

INTRODUCTION

- 1. This action arises from Defendants' unlawful combination, agreement, and conspiracy to fix and restrain trade in, and intentional manipulation of Euroyen TIBOR (the Tokyo Interbank Offered Rate), Yen-LIBOR (the London Interbank Offered Rate for the Japanese yen), and the prices of Euroyen-based derivatives (defined in ¶¶ 191-201) during the period of at least January 1, 2006 through at least June 30, 2011 (the "Class Period") in violation of the Sherman Act, 15 U.S.C. § 1, et seq., the Racketeer Influenced and Corrupt Organizations Act, 18 U.S.C. §§ 1961-1968 ("RICO"), and common law.
- 2. Defendants' rigging of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives during the Class Period was intentional, persistent, and knowingly unlawful. Defendants' misconduct, and the far-reaching, harmful impact on financial markets worldwide, is detailed in numerous guilty pleas, government settlements, deferred prosecution agreements, criminal charges, and findings of fact released in connection with investigations and regulatory actions by governmental agencies in the U.S. and abroad.

Guilty Pleas and Government Settlements Involving the Contributor Bank Defendants

3. The breadth and impact of the wrongdoing alleged herein is staggering. As the U.S. Department of Justice ("DOJ") put it in connection with the guilty plea of Defendant Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A.'s ("Rabobank") former trader:

This conduct distorted transactions and financial products around the world. Manipulating LIBOR effectively rigs the global financial system, compromising the fairness of world markets.

* * *

This was the ultimate inside job. As alleged, traders illegally influenced the very interest rate on which their trades were based, using fraud to gain an unfair advantage. Takayuki Yagami is the ninth person charged by the Justice Department in connection with the industry-wide LIBOR investigation, and we are determined to pursue other individuals and institutions who engaged in this crime.

- 4. Defendant UBS AG ("UBS") has already self-reported criminal cartel activity to the DOJ pursuant to the Antitrust Criminal Penalty Enhancement and Reform Act ("ACPERA") for its admitted manipulation of Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives. The DOJ announced on May 14, 2015 that it was revoking UBS' non-prosecution agreement because of UBS' continued criminal misconduct within the United States, specifically "fraudulent and deceptive currency trading and sales practices…and collusion with other participants in certain [foreign exchange] markets." UBS thereafter agreed to plead guilty to criminal wire fraud charges for the manipulation of Yen-LIBOR and Euroyen TIBOR.²
- 5. Following UBS' footsteps, Defendants UBS Securities Japan Co., Ltd. ("UBS Japan") and RBS Securities Japan Limited ("RBS Japan") each agreed to waive indictment and plead guilty to a one-count criminal information filed in the District of Connecticut by the Criminal Division, Fraud Section, and the Antitrust Division of the DOJ charging each with wire fraud, in violation of 18 U.S.C. § 1343, in connection with their manipulation of Yen-LIBOR

¹ Christopher M. Matthews, Aruna Viswanatha & Devlin Barrett, *Justice Department to Tear Up Past UBS Settlement*, THE WALL STREET JOURNAL (MAY 14, 2015), available at http://www.wsj.com/articles/justice-department-to-tear-up-past-ubs-settlement-1431645723.

² Ex. A-7 (In that plea, UBS admitted that "on or about June 29, 2009, in furtherance of a scheme to defraud counterparties to interest rate derivatives transactions by secretly manipulating benchmark interest rates to which the profitably was tied, UBS transmitted or caused the transmission of electronic communications in interstate and foreign commerce, in violation of Title 18, United States Code, Sections 1343 and 2.").

Euroyen TIBOR, and the prices of Euroyen-based derivatives. As part of its Deferred Prosecution Agreement with the DOJ, RBS Japan's corporate parent The Royal Bank of Scotland plc ("RBS") was also charged with wire fraud and price-fixing in violation of Section 1 of the Sherman Act in connection with its manipulation of Yen-LIBOR and the prices of Euroyen-based derivatives.

- 6. Defendant Rabobank global head of liquidity Anthony Allen and senior trader Anthony Conti were each convicted of wire fraud as well as conspiracy to commit wire fraud and bank fraud charges in this District, following a jury trial before Judge Rakoff ("Allen/Conti Trial"), for their participation in the conspiracy to manipulate U.S. Dollar LIBOR and Yen-LIBOR.³ Other Rabobank traders, including Paul Robson⁴ and Takayuki Yagami⁵ have also pled guilty to conspiracy to commit wire fraud and bank fraud in this District for manipulating Yen-LIBOR and the prices of Euroyen-based derivatives.
- 7. Numerous cartel members, including RBS, Deutsche Bank AG ("Deutsche Bank"), Rabobank, J.P. Morgan Chase & Co. ("JPMorgan"), Citigroup, Inc. ("Citigroup"), Lloyds Banking Group plc ("Lloyds"), Barclays PLC, Barclays Bank PLC, and Barclays Capital Inc. (collectively, "Barclays"), R.P. Martin Holdings Limited ("R.P. Martin"), DB Group Services UK Limited ("DB Group"), and ICAP Europe Limited ("ICAP"), have agreed to historic settlements with regulators, collectively paying (with UBS) over \$7 billion in criminal fines and penalties. The settlements resolve DOJ, U.S. Commodity Futures Trading Commission

³ Nate Raymond & Brendan Pierson, *Former Rabobank Traders Convicted in U.S. Over LIBOR Rigging*, REUTERS (Nov. 5. 2015), http://www.reuters.com/article/2015/11/05/us-rabobank-libor-trial-idUSKCN0SU2HX20151105.

⁴ Former Rabobank LIBOR Submitter Pleads Guilty for Scheme to Manipulate Yen LIBOR, DEPARTMENT OF JUSTICE (Aug. 18, 2014), http://www.justice.gov/opa/pr/former-rabobank-libor-submitter-pleads-guilty-scheme-manipulate-yen-libor.

⁵ Former Rabobank Trader Pleads Guilty for Scheme to Manipulate Yen LIBOR, DEPARTMENT OF JUSTICE (June 10, 2014), http://www.justice.gov/opa/pr/former-rabobank-trader-pleads-guilty-scheme-manipulate-yen-libor.

("CFTC"), the U.K. Financial Services Authority ("FSA"), ⁶ New York State Department of Financial Services ("NYSDFS"), and European Commission ("EC") charges relating to restraints of trade and manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives.

- 8. The factual findings that accompanied the UBS, RBS, Rabobank, Barclays, Deutsche Bank, and Lloyds settlements each included a "Statement of Facts" ("SOF") (of which UBS, RBS, Rabobank, Barclays, Deutsche Bank, and Lloyds respectively, admitted as "true and accurate") that are attached to, and incorporated by reference in, various non-prosecution or deferred prosecution agreements entered with the DOJ's Criminal Division, Fraud Section. UBS', RBS', Rabobank's, Barclays', Deutsche Bank's, and Lloyds' admissions include, *inter alia*:
- 9. <u>UBS</u>. During the period of at least January 2005 through at least June 2010, UBS orchestrated a sustained, wide-ranging and systematic scheme to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives through (i) their intentional and deliberate false reporting of UBS' own Yen-LIBOR and Euroyen TIBOR submissions; (ii) conspiring with and paying bribes to interdealer brokers (employed by the Broker Defendants) to disseminate false and misleading Euroyen rates; and (iii) colluding directly with other interest rate derivatives traders at other Contributor Bank Defendants to increase the likelihood of success in manipulating the prices of Euroyen-based derivatives.
- 10. **RBS**. As part of its Deferred Prosecution Agreement, RBS admitted that it manipulated Yen-LIBOR and the prices of Euroyen-based derivatives from at least 2006 through

⁶ On April 1, 2013, the Financial Services Authority changed its name to the Financial Conduct Authority ("FCA").

2010 through hundreds of instances in which RBS (i) falsely reported its own Yen-LIBOR submissions; and (ii) colluded directly with UBS and interdealer brokers.

- 11. Rabobank. As part of its own Deferred Prosecution Agreement, Rabobank admitted that it manipulated Yen-LIBOR and the prices of Euroyen-based derivatives from May 2006 through November 2010 in order to illegitimately profit on their own Euroyen-based derivatives positions. Rabobank also admitted that from as early as May 2006 and continuing at least through October 2008, Rabobank colluded with a trader at another Yen-LIBOR Contributor Panel bank (Defendant Lloyds) and agreed that they would, upon request, manipulate their own Yen-LIBOR submissions to benefit each other's Euroyen-based derivatives positions or the trading positions of other traders.
- August 2006 through approximately June 2007, and also in June 2009, made at least 26 requests to its rate submitters to manipulate Barclays' Yen-LIBOR submissions in a direction that would benefit Barclays' Euroyen-based derivatives positions. Barclays further admitted that certain of its swaps traders colluded with traders at other Contributor Bank Defendants to make Yen-LIBOR false submissions, and on occasion accommodated requests for false Yen-LIBOR submissions made by other traders, so as to coordinate their manipulative and anticompetitive conduct.
- Deutsche Bank. As part of its Deferred Prosecution Agreement with the DOJ,
 Deutsche Bank admitted that it manipulated Yen-LIBOR, Euroyen TIBOR, and the prices of
 Euroyen-based derivatives from at least 2006 through 2010. Deutsche Bank also agreed to
 waive indictment and pled guilty to price-fixing Yen-LIBOR and Euroyen TIBOR in violation of
 § 1 of the Sherman Act. Deutsche Bank admitted that its traders regularly requested false Yen-

LIBOR and Euroyen TIBOR submissions and that its Yen-LIBOR and Euroyen TIBOR submitters honored these requests. Deutsche Bank also admitted that from at least 2008, it colluded with former UBS and Citibank Yen Trader, Tom Hayes, to manipulate Yen-LIBOR and Euroyen TIBOR. In addition, Deutsche Bank admitted that it failed to cooperate with the DOJ's investigation in several respects by slowly producing relevant information, not providing evidence of its coordination with other banks, destroying documents, audio, and data, and hiding the Federal Financial Supervisory Authority for Germany's ("BaFin") LIBOR misconduct findings from the DOJ.

- Lloyds. As part of its Deferred Prosecution Agreement, Lloyds admitted that between at least as early as 2006 and at least as late as July 2009, it manipulated Yen-LIBOR in order to illegitimately profit from their Euroyen-based derivatives positions. Lloyds also admitted that from as early as June 2006 through at least October 2008, it colluded directly with Rabobank and Rabobank's Yen-LIBOR submitter Paul Robson to make Yen-LIBOR submissions that mutually benefitted their Euroyen-based derivative trading positions.
- 15. The UBS, RBS, Rabobank, Barclays, Deutsche Bank, and Lloyds Settlements are also memorialized in "CFTC Orders" and "FSA Final Notices" which include additional factual allegations consistent with the admissions contained in the DOJ statement of facts regarding unlawful acts by Defendants UBS, RBS, Rabobank, Barclays, Deutsche Bank, and Lloyds.
- 16. In December 2013, the EC collectively fined Defendants UBS, RBS, Deutsche Bank, JPMorgan, Citigroup, and R.P. Martin more than \$870 million for participating in "Yen Interest Rate Derivatives cartels" between 2007 and 2010. The EC uncovered seven distinct "infringements" lasting between 1 and 10 months and found that these Defendants colluded to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. In

February 2015, the EC also fined inter-dealer broker ICAP €14.9 million for its participation in this Yen interest rate derivatives cartel with UBS, RBS, Deutsche Bank, Citigroup, JPMorgan, and R.P. Martin.

- 17. Government Settlements Involving the Broker Defendants. As detailed herein, the Broker Defendants played a critical role in the successful manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. They acted as the proverbial hub in the conspiratorial wheel by coordinating and directing the submission of false reports and other manipulative conduct between the Contributor Bank Defendants, contributing to the restraint of trade in the Euroyen-based derivatives market.
- 18. To date, Broker Defendants ICAP Europe Limited ("ICAP") and R.P. Martin have reached settlements with the CFTC and FCA agreeing to pay \$87 million (ICAP Europe Limited) and \$2.2 million (R.P. Martin), respectively. Both ICAP and R.P. Martin, with Broker Defendant Tullett Prebon PLC ("Tullett Prebon"), remain under investigation by the U.K. Serious Fraud Office, among other global regulators.
- 19. <u>ICAP</u>. UBS, in particular former UBS Senior Yen Trader Thomas Hayes ("Hayes"), colluded with ICAP Yen brokers and requested their assistance more than 400 times in manipulating Yen-LIBOR during the Class Period. ICAP brokers readily agreed and accommodated those and other manipulative requests by issuing, via a Yen cash broker, group emails to panel banks and others containing "Suggested LIBORs" for Yen-LIBOR. The Suggested LIBORs reflected artificial rates that would financially benefit UBS' and Hayes' Euroyen-based derivatives positions, not an honest and objective assessment of prevailing Yen-LIBOR rates.

- 20. This manipulative strategy was successful as almost all of the Yen-LIBOR Contributor Banks received the Suggested LIBORs, and several improperly relied on them in making their Yen-LIBOR submissions. Recognizing their success in manipulating Yen-LIBOR and Euroyen-based derivatives prices, the ICAP brokers referred to the Contributor Bank Yen-LIBOR submitters as "sheep" when they copied the Yen cash broker's Suggested LIBORS. In fact, the CFTC determined that at least two Contributor Banks' submissions mirrored the Suggested LIBORs up to 90% of the time. This occurred, despite express British Bankers' Association ("BBA") guidelines that prohibited Contributor Banks from relying on brokers "Suggested LIBORs" when making their Yen-LIBOR submissions.
- 21. ICAP Yen brokers were well compensated for colluding with UBS receiving hundreds of thousands of dollars in bribes and kickbacks for their "LIBOR services."
- R.P. Martin. Like ICAP brokers, R.P. Martin brokers on its Yen desks knowingly disseminated false and misleading information concerning Yen borrowing rates to market participants to manipulate Yen-LIBOR and the prices of Euroyen-based derivatives. R.P. Martin brokers did so primarily to aid and abet former UBS Senior Yen Trader Hayes. The FCA determined that, during the Class Period, UBS made at least 600 manipulative requests to R.P. Martin. R.P. Martin, in turn, provided misleading recommendations to Yen-LIBOR submitters regarding where they should set certain Yen-LIBOR tenors. R.P. Martin also contacted certain Yen-LIBOR submitters directly and asked them to move their submissions in an artificial direction that would benefit UBS' and Hayes' Euroyen-based derivatives positions. R.P. Martin brokers also colluded with UBS to publish "spoof' bids to the Euroyen-based derivatives market, which included Yen-LIBOR submitters, again to manipulate Yen-LIBOR and Euroyen-based derivatives prices for the benefit of UBS and Senior Yen Trader Hayes. In exchange for their

unlawful assistance, R.P. Martin brokers accepted bribes and other illicit compensation from UBS and other Contributor Bank Defendants totaling more than \$400,000.

- 23. <u>Direct Evidence of Manipulative and Anticompetitive Conduct</u>. Although only a small fraction of Defendants' communications have thus far been made public in connection with the UBS, RBS, Rabobank, ICAP, R.P. Martin, Barclays, Deutsche Bank, and Lloyds Settlements, those communications already include what courts have characterized as "rare," "smoking gun," and "direct" evidence of blatant market manipulation and illicit conspiratorial conduct. Defendants' own words are unencumbered by any concern of market oversight, internal supervision, legal recourse, or the far reaching, negative, and material impact of their misconduct on the prices of Euroyen-based derivatives. Corruption of the Euroyen market became so widespread that in the words of an RBS Senior Yen Trader, Jimmy Tan, the banks setting Yen-LIBOR had become a "cartel."
- 24. For example, in one communication, Hayes and R.P. Martin broker Terry Farr congratulated each other on the financial success of Defendants' manipulative conduct: "mate yur getting bloody good at this libor game....think of me whn yur on yur yacht in monaco wont you" (emphasis added). In another communication, Jimmy Tan at RBS bragged: "its just amazing how libor fixing can make you that much money" and that the manipulation was a "good way to boost share price" (emphasis added). Additionally, traders routinely thanked rate submitters for carrying out their instructions to submit false Euroyen rates that benefitted their Euroyen-based derivatives positions, remarking "cheers," "thanks mate," and "thanks for that."
- 25. When Rabobank's Paul Robson pled guilty to conspiracy to commit bank fraud and wire fraud in this District, he admitted he knew that American financial institutions would be negatively impacted by his Yen-LIBOR manipulation:

I tailored the yen LIBOR submissions I made on behalf of Rabobank in order to profit the bank's position . . . I understood the parties taking opposite trading positions could be negatively affected and I knew that some of these parties that could be affected were American financial institution...When I made these submissions designed to favor the bank's trading positions, I knew that it was wrong to do so.⁷

26. Other Indicia of Unlawful Conduct: Knowledge of Unlawfulness and

Conduct to Escape Detection. Defendants continued their pervasive manipulation of Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives long-after authorities launched investigations into false reporting and manipulation of U.S. Dollar LIBOR. For example, RBS traders and submitters acknowledged internally by at least September 2010 that regulators were investigating false reporting of U.S. Dollar LIBOR, but nonetheless agreed to continue manipulating Yen-LIBOR and other interest rates. RBS traders and submitters, however, recognized that they should be more careful to cover their tracks to avoid detection by no longer discussing in writing their manipulation of Yen-LIBOR, at least while regulators investigated U.S. Dollar LIBOR manipulation.

- 27. For example, in one exchange on November 22, 2010, RBS traders Jimmy Tan and Neil Danziger acknowledged that "at the moment the FED are all over us about USD libors" but because they did not "think anyone cares [about] JPY [Yen] libor" at least "not yet," they had the green light to continue manipulating the prices of Euroyen-based derivatives.
- 28. Other instant messages and communications produced in connection with the government settlements evidence that the knowing submission of false Euroyen TIBOR and/or Yen-LIBOR rates to financially benefit Euroyen-based derivatives positions was the norm, while submitting rates reflective of prevailing (true) Euroyen interbank borrowing costs in accordance with Japanese Bankers Association ("JBA") and BBA rules was the exception.

⁷ United States v. Robson, No. 14-cr-272, ECF No. 21 at 12-13 (Sept. 2, 2014).

- 29. Other Indicia of Unlawful Conduct: The Role of Managers. Unlike prior manipulation cases where a rogue trader singularly concocted and orchestrated a manipulation, the manipulation here had the blessing—and in many instances was at the immediate direction—of the Contributor Banks' and Broker Defendants' senior managers who were charged with supervising for-profit Euroyen-based derivatives trading at the firm. For example, at Deutsche Bank, management created "Monday Risk Calls" to ensure that its Yen-LIBOR and Euroyen TIBOR traders and submitters were on the same page and would manipulate Yen-LIBOR and Euroyen TIBOR in the most beneficial direction for their Euroyen-based derivatives positions.
- 30. In another example, on December 11, 2007, UBS Manager Mike Pieri emailed another UBS Senior Manager to see "how much pressure" they could "exert" on UBS's upcoming Yen-LIBOR submissions because UBS had a potential exposure of "2[million/per basis point]" on the approaching December International Monetary Market ("IMM") date. To justify the manipulation, Pieri stated that because "everyone will be trying to influence the [upcoming Yen-LIBOR] fixing," UBS could lose on its Euroyen-based derivatives positions if UBS did not "do the same." In response, UBS Senior Manager "D" promised he would handle the situation and discuss it with another UBS senior manager. A distressed Pieri followed up with Senior Manager "D" three days later, on December 14, 2007, to see if the manipulation had been approved: "How was the discussion... I need some assurance they will put their rate up please... our rate input can make a significant difference."
- 31. Other Indicia of Unlawful Conduct: Spoofing the Market and False Euroyen
 Derivative Price Reports. The Contributor Bank Defendants and Broker Defendants also
 colluded to manipulate Euroyen-based derivative prices by publishing false Euroyen-based

⁸ IMM dates occur on the third Wednesday of March, June, September, and December. Many Euroyen-based derivatives are priced, benchmarked, and/or settled on IMM dates.

derivatives transactions and by disseminating false Euroven-based derivative price quotes, including false bid and offer prices, to the Euroyen-based derivatives market. UBS asked Broker Defendants, including ICAP, to display on the Broker Defendants' electronic trading screens prices of non-existent Euroyen-based derivatives transactions with the same tenors as the Yen-LIBOR and Euroyen TIBOR rates for the purpose of manipulating both the prices of Euroyenbased derivatives and Yen-LIBOR and Euroyen TIBOR rates. The Broker Defendants' electronic trading screens were available to Euroyen-based derivatives dealers and traders including many of the Contributor Bank Defendants. UBS also asked Broker Defendants to post and disseminate "spoof" bids and offers for Euroyen-based derivatives with the same tenors as the Yen-LIBOR and Euroyen TIBOR rates for the purpose of manipulating both the prices of Euroyen-based derivatives and Yen-LIBOR and Euroyen TIBOR rates. Defendants colluded to disseminate spoof bids and offers through various means including through Broker Defendants' Yen Desk "squawk boxes" and through the Broker Defendants' electronic screens, which allowed UBS and the Broker Defendants to disseminate the "spoof" bids and offers to a multitude of Euroyen-based derivatives traders, including multiple Contributor Bank Defendants.

- 32. <u>Direct Evidence of Anticompetitive Conduct</u>. The communications made public so far show rampant collusion and agreements to restrain trade in the Euroyen-based derivatives market. The competing banks agreed to "back scratching" arrangements, whereby co-conspirators explicitly agreed to submit artificial Euroyen rates to financially benefit other co-conspirators' Euroyen-based derivatives positions in return for reciprocity sometime in the future.
- 33. The Contributor Bank Defendants, aided and abetted by Broker Defendants, agreed to stagger false reporting of Yen-LIBOR rates over successive trading days (e.g., agreeing

that an artificially low rate would be submitted by manipulator A today, by manipulator B tomorrow and manipulator C the next day, etc.) in order to exert greater and longer-lasting manipulative pressure on Euroyen-based derivatives prices and to mask their false reporting. In one such example, ICAP Broker Darrell Read developed a strategy in July 2009 with former UBS Senior Yen Trader Hayes to artificially lower the six-month Yen-LIBOR. The ICAP Broker cautioned Hayes that, "if you drop your 6m dramatically on the 11th [of August] mate, it will look v[ery] fishy, especially if [HSBC] and [Deutsche Bank] go with you[,] I'd be v[ery] careful how you play it... might get people questioning you." UBS Senior Yen Trader Hayes, seasoned in this practice, said, "don't worry will stagger the drops ie 5bp then 5bp...us then [Deutsche Bank] then [HSBC]. The ICAP Broker confirmed their agreement to collusively manipulate six-month Yen-LIBOR artificially lower and said, "great the plan is hatched and sounds sensible."

- 34. There are at hundreds of publicly available instant messages showing collusion between UBS, RBS, Rabobank, ICAP, Deutsche Bank, R.P. Martin, and Lloyds and several of the Contributor Bank Defendants. In one message alone, former UBS Senior Yen Trader Hayes enlisted Broker Defendant Tullett Prebon to solicit 9 of the 16 Contributor Panel banks to join the conspiracy to manipulate Yen-LIBOR. Other messages show that one additional bank (the 10th) agreed to collude with UBS to artificially increase Yen-LIBOR on March 31, 2009.
- 25. <u>Defendants' Former Traders and Rate-Submitters Have Been Criminally</u>

 <u>Charged in this District and Abroad</u>. Former UBS and Citibank Yen Trader Hayes, along with another UBS Yen Trader, Roger Darin, were charged with conspiracy to commit wire fraud in a criminal complaint unsealed in Manhattan federal court in December 2012. Hayes also faces

wire fraud and Sherman Act charges from alleged anticompetitive conduct in relation to Yen-LIBOR from at least September 2006 through September 2009. *See* Ex. A-6.

- 36. The DOJ also charged three former ICAP brokers, Darrell Read, Daniel Wilkinson and Colin Goodman, with conspiracy to commit wire fraud and wire fraud in connection with the manipulation of Yen-LIBOR from at least July 2006 through September 2010. *See* Ex. C-3.
- The DOJ also charged three former Rabobank traders, Paul Robson, Paul Thompson and Tetsuya Motomura with conspiracy to commit wire fraud, conspiracy to commit bank fraud, and wire fraud in connection with the manipulation of Yen-LIBOR from May 2006 through early 2011. *See* Ex. D-5. Former Rabobank trader Takayuki Yagami and former Rabobank Yen-LIBOR submitter Paul Robson each plead guilty to conspiracy to commit wire fraud and bank fraud in this District before Judge Rakoff for their role in the manipulation of Yen-LIBOR. *See* Ex. D-6. Both Yagami and Robson are cooperating with the DOJ in its ongoing investigation of the criminal conduct alleged herein.
- 38. Rabobank global head of liquidity Anthony Allen and senior trader Anthony

 Conti were each convicted of wire fraud as well as conspiracy to commit wire fraud and bank

 fraud charges in this District, following a jury trial before Judge Rakoff, for their participation in
 the conspiracy to manipulate U.S. Dollar LIBOR and Yen-LIBOR.⁹
- 39. In June 2013, the U.K. Serious Fraud Office ("SFO") charged former UBS and Citibank Senior Yen Trader Hayes with eight counts of conspiracy to defraud and directly implicated Defendants (i) UBS AG; (ii) Citigroup Global Markets Japan Limited, (iii) Deutsche Bank AG, (iv) UBS Japan, (v) JP Morgan Chase & Co., (vi) RBS, (vii) HSBC, and (viii)

⁹ Nate Raymond & Brendan Pierson, Former Rabobank Traders Convicted in U.S. Over LIBOR Rigging, REUTERS (Nov. 5. 2015), http://www.reuters.com/article/2015/11/05/us-rabobank-libor-trial-idUSKCN0SU2HX20151105.

Rabobank, as well as Broker Defendants (i) ICAP, (ii) R.P. Martin and (iii) Tullett Prebon in the manipulation of Yen-LIBOR and "other interbank offered rates" from August 2006 through December 2010. Hayes was convicted of all eight counts of conspiracy to defraud in August 2015. Hayes was sentenced to fourteen years in prison for manipulating Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives.

- 40. In July 2013, the SFO also charged former R.P. Martin brokers Terry Farr and James Gilmour with conspiracy to defraud from August 2006 through September 2010 in connection with the manipulation of Yen-LIBOR.
- 41. In addition, in March 2014, the SFO charged former ICAP brokers Danny Wilkinson, Darrell Read, and Colin Goodman with conspiracy to defraud charges from August 2006 through September 2010 in connection with the manipulation of Yen-LIBOR. Currently, former ICAP brokers Danny Wilkinson, Darrell Read, and Colin Goodman, R.P. Martin brokers Terry Farr and James Gilmour, and Tullett Prebon broker Noel Cryan are being tried in the U.K. for conspiracy to defraud. The trial is set to conclude in early January 2016.
- Rate Setting Panels. Both RBS and UBS have since withdrawn from the JBA's Euroyen
 TIBOR panel. In addition, more than 25 people resigned from UBS following an internal review
 of the bank's involvement in the alleged manipulation of Euroyen TIBOR and Yen-LIBOR rates.
 RBS has also terminated four employees, and is reportedly weighing further disciplinary
 proceedings against additional employees. Barclays Chairman Marcus Agius, and its Chief
 Executive Officer, Robert E. Diamond, Jr., resigned within days of the announcement of the
 Barclays Settlement. In connection with his resignation, Mr. Diamond revealed that at least 14
 traders at Barclays were involved in rate setting wrongdoing at the bank. The Chief Executive

of Defendant RBS Japan resigned in the wake of the Japanese Financial Services Agency's ("JFSA") administrative sanctions against Defendant RBS Japan.

- 43. <u>Public Officials and Other Market Participants Acknowledge The Existence</u> of Cartels and Wide-Spread Collusion in the Euroyen Market.
- 44. The EC fined Defendants UBS, RBS, Deutsche Bank, JP Morgan, Citigroup and R.P. Martin a total of \$870 million for their participation in "Yen Interest Rate Derivatives Cartels." Joaquin Aluminia, Vice-President of the EC, commented "What is shocking about the LIBOR...scandal[] is not only the manipulation of benchmarks, which is being tackled by financial regulators worldwide, but also *the collusion between banks who are supposed to be competing with each other*. Today's decision sends a clear message that the Commission is determined to fight and sanction these cartels in the financial sector. Healthy competition and transparency are crucial for financial markets to work properly, at the service of the real economy rather than the interests of a few." (Emphasis added).
- 45. CFTC Chairman Gary Gensler expressed a similar sentiment, stating that: "Barclays, UBS and RBS were fined \$2.5 billion for manipulative conduct by the CFTC, the UK Financial Services Authority (FSA) and the DOJ. At each bank, the misconduct spanned many years, took place in offices in several cities around the globe, included numerous people sometimes dozens, even included senior management, and involved multiple benchmark rates and currencies. In each case, there was evidence of collusion."
- 46. In February 2013, Eddy Takata, a Tokyo-based Yen money market derivatives trader who worked for Defendants Barclays and Deutsche Bank during the Class Period, published a book entitled THE MANIPULATION OF THE LIBOR FIXING, AND THE DOUBT OVER THE ARTIFICIAL TIBOR FIXING (HIDETO "EDDY" TAKATA (Gentosha Renaissance, Inc.), February 20,

- 2013). The former trader alleges the large increase of Euroyen TIBOR over Yen-LIBOR since 2009 was the result of collusion amongst the Euroyen TIBOR rate setting banks so that the banks could borrow Yen-LIBOR at a lower rate and lend at the higher Euroyen TIBOR rate.
- 47. In May 2014, the *Financial Times* reported "gaps between Tibor rates and rates in actual interbank transactions" revealing that in the first part of 2014, the actual market rate for three-month funds was 0.14% whereas three-month Euroyen TIBOR was significantly higher at 0.215%. The same report also revealed price anomalies in the spread between Yen-LIBOR and Euroyen TIBOR, showing that the average spread was 14 basis points between 2009 and 2012. However, this "gap narrowed sharply in the first three months of 2013" following criminal probes and allegations made by trader Eddy Takata that Japanese banks were conspiring to keep Euroyen TIBOR artificially high.
- 48. Evidence Revealed at Hayes' Criminal Trial Confirms Plaintiffs' Allegations.

 Former UBS Senior Yen Trader Hayes, who at times accounted for roughly 40% of the over-thecounter Euroyen-based derivatives market and has been described as the "ringmaster" of
 Defendants' scheme, was arrested in the U.K. on December 11, 2012, and charged with eight
 counts of conspiracy to defraud for his involvement in rigging Yen-LIBOR and Euroyen TIBOR.
- 49. Hayes' criminal trial, *R. v. Hayes*, T No. T20137308 ("Hayes Trial") began in the Southwark Crown Court on May 26, 2015. The trial has provided new insight into how Defendants manipulated Yen-LIBOR and Euroyen TIBOR to fix the prices of Euroyen-based derivatives at artificial levels for their benefit, including, *inter alia*, highlights from more than 80 hours of recorded testimony Hayes gave to the SFO, live witnesses from Hayes former employer Citibank, and hundreds of new communications beyond those released in the Defendants' government settlements.

TIBOR on a daily basis, coordinating their false Yen-LIBOR and/or Euroyen TIBOR submissions with dozens of traders, submitters, and inter-dealer brokers. By working together, Defendants rigged the market for Euroyen-based derivatives for long periods of time, including during at least seven long-term "campaigns," demonstrating that prices were artificial throughout the Class Period. The pervasive and persistent nature of Defendants' Yen-LIBOR and Euroyen TIBOR manipulation extended beyond their trading desks to company management, who not only knew that the prices of Euroyen-based derivatives were being manipulated for their benefit, but encouraged that practice.

JURISDICTION AND VENUE

- 51. This Court has jurisdiction over this action pursuant to Section 1 of the Sherman Antitrust Act, 15 U.S.C. § 1, Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15 and 26(a), Section 1964 of RICO, 18 U.S.C. § 1964, and 28 U.S.C. §§ 1331 and 1337, respectively. This Court also has jurisdiction over the state law claims under 28 U.S.C. § 1367 because those claims are so related to the federal claim that they form part of the same case or controversy, and under 28 U.S.C. § 1332 because the amount in controversy for the Class exceeds \$5,000,000 and there are members of the Class who are citizens of a different state than Defendants.
- 52. Venue is proper in the Southern District of New York, pursuant to, among other statutes, Sections 4, 12 and 16 of the Clayton Act, 15 U.S.C. §§ 15, 22 and 26, Section 1965 of RICO, 18 U.S.C. § 1965, and 28 U.S.C. §1391(b), (c) and (d). One or more of the Defendants resided, transacted business, were found, or had agents in the District, and a part of the events or omissions giving rise to the claims occurred in the Southern District of New York.
- 53. Defendants, directly and indirectly, singly and in concert, made use of the means and instrumentalities of transportation or communication in, or the instrumentalities of, interstate

and/or international commerce, or of the mails in connection with the unlawful acts and practices and courses of business alleged in this Complaint.

54. Defendants' restraint of trade and manipulation of Euroyen TIBOR, Yen-LIBOR, and the prices of Euroyen-based derivatives had direct, substantial, and reasonably foreseeable effects in the U.S., and on Plaintiffs and members of the Class. Euroyen-based derivatives are actively traded in the United States and by U.S.-based counterparties. Defendants, as sophisticated market participants, knew or should have known, that the Euroyen TIBOR and Yen-LIBOR rates published and compiled by and on behalf of the JBA and BBA, respectively, are disseminated in the U.S. through electronic means, and are used to price, settle, and benchmark Euroyen-based derivatives traded in the U.S. and by U.S. investors. For these reasons, Defendants knew or should have known, that the misreporting of Euroyen TIBOR and Yen-LIBOR rates to the JBA and BBA, respectively, as well as Defendants' other manipulative and collusive conduct would, and did, have direct, substantial and reasonably foreseeable effects in the United States, including on the prices of Euroyen-based derivatives transacted domestically.

PARTIES

- 55. Plaintiff Sonterra Capital Master Fund, Ltd. ("Sonterra") is an investment fund with its principal place of business in New York. Sonterra engaged in U.S.-based transactions for Euroyen-based derivatives, including Yen foreign exchange forwards, during the Class Period at artificial prices proximately caused by Defendants' unlawful manipulation and restraint of trade as alleged herein. As a result of Defendants' manipulative conduct, Sonterra was damaged and suffered legal injury. *See* Parts IX.A and IX.D, *infra*.
- 56. Plaintiff Hayman Capital Management L.P. (formerly Hayman Advisors, L.P.), an investment advisor incorporated in Delaware with its principal place of business in Dallas,

Texas, brings claims on behalf of the investment funds it advises (collectively "Hayman"). All of Hayman's Euroyen-based derivatives traders are located in Dallas, Texas. Hayman engaged in U.S.-based transactions for Euroyen-based derivatives, including Yen-LIBOR-based interest rate swaps and Yen-LIBOR-based "swaptions," *i.e.*, options on Yen-LIBOR-based interest rate swaps, directly with Defendants Barclays, Merrill Lynch, JPMorgan, and Deutsche Bank during the Class Period. Because these Euroyen-based derivatives are priced, benchmarked, and settled based on Yen-LIBOR, Hayman transacted at artificial prices that were directly and proximately caused by Defendants' rigging of Yen-LIBOR and Euroyen TIBOR. As a result of Defendants' manipulative conduct, Hayman was damaged and suffered legal injury. *See* Parts IX.B and IX.D, *infra*.

57. Plaintiff California State Teachers' Retirement System ("CalSTRS") is the largest U.S. teachers' retirement fund, with approximately \$188 billion in assets and close to one million members. CalSTRS engaged in U.S.-based transactions for Euroyen-based derivatives, including Yen foreign exchange forwards that were priced based on Yen-LIBOR, with Defendants UBS, Citibank, Deutsche Bank, RBS, HSBC, Bank of America, JPMorgan, Barclays and Société Générale, during the Class Period at artificial prices proximately caused by Defendants' unlawful manipulation and restraint of trade as alleged herein. As a result of Defendants' manipulative conduct, CalSTRS was damaged and suffered injury. *See* Parts IX.C and IX.D, *infra*.

A. The Bank of America Defendants

58. Defendant Bank of America Corporation is incorporated in Delaware and headquartered at 100 North Tryon Street, Charlotte, North Carolina 28255. Bank of America Corporation operates an investment banking division located in this District at the Bank of America Tower, One Bryant Park, 1111 Avenue of the Americas, New York, New York 10036.

Merrill Lynch & Co., Inc. and the entire Merrill Lynch family are subsidiaries of Bank of America Corporation. In 2013, Merrill Lynch & Co., Inc. merged into Bank of America Corporation. Bank of America assumed all of Merrill Lynch & Co.'s liabilities following the merger. 11

- 59. Defendant Bank of America, N.A. is a federally-chartered national banking association headquartered at 101 South Tyron Street, Charlotte, North Carolina 28255. Bank of America, N.A. is an indirect, wholly-owned subsidiary of Bank of America Corporation. Bank of America, N.A. operates an office in this District at the Bank of America Tower, One Bryant Park, 1111 Avenue of the Americas, New York, New York 10036. Bank of America, N.A. is a provisionally registered swap dealer with the CFTC. Collectively, Bank of America Corporation and Bank of America, N.A. are referred to as "Bank of America." During the Class Period, Bank of America was a member of the BBA Yen-LIBOR panel.
- 60. Defendant Merrill Lynch International ("Merrill Lynch") is an investment advisor headquartered in London. Merrill Lynch is a provisionally registered swap dealer with the CFTC. Plaintiff Hayman traded Euroyen-based derivatives from within the United States directly with Merrill Lynch.

B. The Bank of Tokyo-Mitsubishi Defendant

61. Defendant The Bank of Tokyo-Mitsubishi UFJ, Ltd. ("Bank of Tokyo-Mitsubishi") is a Japanese commercial bank that provides deposits, loans, insurance agency, and securities investment trusts for individuals and businesses. During the Class Period, the Bank of

¹⁰ Dakin Campbell, *Bank of America Finishes Merger of Merrill Lynch Into Parent*, BLOOMBERG BUSINESS (Oct. 1, 2013), available at http://www.bloomberg.com/news/articles/2013-10-01/bank-of-america-finishes-merger-of-merrill-lynch-into-parent-1-.

¹¹ *Id*.

Tokyo-Mitsubishi was a member of the JBA Euroyen TIBOR panel and the BBA Yen-LIBOR panel.

- 62. Bank of Tokyo-Mitsubishi maintains a branch in this District at 1251 Avenue of the Americas, New York, New York 10020-1104, as well as Chicago and Los Angeles branches. Bank of Tokyo-Mitsubishi has maintained "a presence in New York since 1880" and is a provisionally registered swap dealer with the CFTC.
- 63. The Bank of Tokyo-Mitsubishi New York Branch is licensed, supervised, and regulated by the NYSDFS to do business in this state. Bank of Tokyo-Mitsubishi is also regulated by the Board of Governors of the Federal Reserve System and the National Futures Association. As of March 31, 2014, Bank of Tokyo-Mitsubishi had \$134 billion in total assets and 2,135 full-time employees at its New York Branch. One of the New York Branch's "core business lines" is its Global Markets Division for the Americas-Portfolio Management Group, which transacts in financial market products and is responsible for market risk control management, hedge income management, and liquidity risk control. Bank of Tokyo-Mitsubishi New York Branch's other core business line is the U.S. Corporate Banking Division, which transacts in foreign exchange and derivatives products. Bank of Tokyo-Mitsubishi New

¹² *The Americas*, THE BANK OF TOKYO-MITSUBISHI UFJ, LTD. (last accessed on Nov. 6, 2015), available at http://www.bk.mufg.jp/global/globalnetwork/americas/.

¹³ New York, THE BANK OF TOKYO-MITSUBISHI UFJ, LTD. (last accessed on Nov. 6, 2015), available at http://www.bk.mufg.jp/global/.

¹⁴ Public: Mitsubishi UFJ Financial Group, Inc. Resolution Plan, MITSUBISHI UFJ FINANCIAL GROUP INC., at 5, 6 (July 1, 2014), available at http://www.federalreserve.gov/bankinforeg/resolution-plans/mitsubishi-fin-3g-20141231.pdf.

¹⁵ *Id.* at 10.

¹⁶ *Id*.

York Branch is an Automated Clearing House, *i.e.*, it provides an electronic network for U.S. financial transactions.¹⁷

64. Bank of Tokyo-Mitsubishi served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Bank of Tokyo-Mitsubishi provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets.

C. The Barclays Defendants

- 65. Defendant Barclays PLC is a global financial services provider headquartered and incorporated in England. Two of Barclays PLC's "material entities" within the United States are Barclays Bank PLC New York Branch and Barclays Capital, Inc. ¹⁸ Barclays PLC owns all of the issued ordinary share capital of Defendant Barclays Bank PLC. ¹⁹
- 66. Defendant Barclays Bank PLC ("Barclays Bank"), a wholly-owned subsidiary of Defendant Barclays PLC, maintains an office in this District at 745 Seventh Avenue New York, New York 10019 ("Barclays Bank PLC, New York Branch"). During the Class Period, Barclays Bank was a member of the BBA Yen-LIBOR panel.
- 67. Barclays Bank PLC, New York Branch has been licensed, supervised, and regulated by the NYSDFS to do business in this state since 1963. Barclays Bank PLC, New York Branch has over 500 employees and more than \$36 billion in total assets. Barclays Bank is also regulated by the Board of Governors of the Federal Reserve System and the Florida Office of Financial Regulation. Barclays Bank is a provisionally registered swap dealer with the CFTC. Barclays Bank's shares are listed on the New York Stock Exchange ("NYSE"). Plaintiff

¹⁷ *Id.* at 22.

¹⁸ Resolution Plan, Section 1: US Public Section, BARCLAYS, at 2 (July 2012).

¹⁹ Form 20-F, Barclays PLC, Barclays Bank PLC (2005).

Hayman and Plaintiff CalSTRS traded Euroyen-based derivatives from within the United States directly with Barclays Bank.

- 68. Barclays Bank admitted as true in its DOJ settlement that "Barclays employs derivatives traders in New York, New York and in London, England who trade financial instruments tied to LIBOR and EURIBOR, including interest rate swaps[.]"²⁰
- 69. Defendant Barclays Capital Inc. ("BCI"), a wholly-owned subsidiary of Barclays PLC, is a financial services firm incorporated in Connecticut that offers advisory, brokerage, and banking services. BCI maintains its headquarters in this District at 745 Seventh Avenue New York, New York 10019. BCI is a clearing firm on the Chicago Mercantile Exchange ("CME"), the Chicago Board of Trade ("CBOT"), the New York Mercantile Exchange ("NYMEX"), and the Commodity Exchange, Inc. ("COMEX"). BCI is registered with the CFTC as a Futures Commission Merchant, an Exempt Foreign Agent, and a Commodity Pool Operator and Commodity Trading Advisor. Plaintiff CalSTRS traded Euroyen-based derivatives from within the United States directly with BCI.
- 70. Collectively, Barclays PLC, Barclays Bank PLC, and BCI are referred to as "Barclays."

D. The Bank of Yokohama Defendants

71. Defendant The Bank of Yokohama, Ltd. ("The Bank of Yokohama") is a banking services company that maintains an office in this District at 780 Third Ave, New York, New York 10017. During the Class Period, The Bank of Yokohama was a member of the JBA Euroyen TIBOR panel.

²⁰ Ex. G-1 at 5-6.

72. The Bank of Yokohama is licensed, supervised, and regulated by the NYSDFS to do business in this state. The Bank of Yokohama served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, the Bank of Yokohama provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets.

E. The Citibank Defendants

- 73. Defendant Citigroup, Inc. ("Citigroup") is a Delaware corporation with its headquarters in this District at 399 Park Avenue, New York, New York 10043. Defendant Citibank, N.A. is a federally-chartered national banking association incorporated in South Dakota and a wholly-owned subsidiary of Defendant Citigroup Inc. Citibank, N.A. maintains an office in this District at 399 Park Avenue, New York, New York 10043. Citibank, N.A. was a member of the BBA Yen-LIBOR panel during the Class Period.
- 74. Defendant Citibank, Japan Ltd. ("Citibank Japan") is a Japanese commercial bank headquartered in Tokyo and a wholly-owned subsidiary of Defendant Citigroup Inc. During the Class Period, Citibank Japan was a member of the JBA Euroyen TIBOR panel.
- 75. Defendant Citigroup Global Markets Japan Inc. ("Citigroup Global Markets") is a Japanese wholesale investment bank headquartered in Tokyo. Citigroup Global Markets is a wholly-owned subsidiary of Defendant Citigroup, Inc. and an affiliate of Citibank Japan.

 Defendant Citigroup, which controlled Defendants Citibank, N.A., Citibank, Japan Ltd., and Citigroup Global Markets Japan Inc., reaped significant financial benefit from, and actively participated in, the unlawful conduct alleged herein.
- 76. Collectively, Citigroup, Citibank N.A., Citibank Japan, and Citigroup Global Markets are referred to as "Citibank." Plaintiff CalSTRS traded Euroyen-based derivatives from within the United States directly with Citibank.

F. The Deutsche Bank Defendants

- 77. Defendant Deutsche Bank AG ("Deutsche Bank") is a German financial services company headquartered in Frankfurt, Germany. During the Class Period, Deutsche Bank was a member of the JBA Euroyen TIBOR panel and a member of the BBA Yen- LIBOR panel.
- 78. Deutsche Bank's U.S. headquarters are in New York. Its New York branch ("Deutsche Bank AG, New York Branch") is located in this District at 60 Wall Street, New York, New York 10005. Deutsche Bank considers Deutsche Bank AG, New York Branch to be a "material entity" within the United States. Deutsche Bank AG, New York Branch is licensed, supervised, and regulated by the NYSDFS to do business in this state. Deutsche Bank is also registered with the Board of Governors of the Federal Reserve System. Deutsche Bank AG, New York Branch has more than 1,700 employees and total assets exceeding \$152 billion.

 Deutsche Bank is a registered swap dealer with the CFTC. Deutsche Bank engages in Euroyen-based derivatives trading activities from its New York Branch, including interest rate derivatives price based on Yen-LIBOR and Euroyen TIBOR. Plaintiff Hayman and Plaintiff CalSTRS traded Euroyen-based derivatives from within the United States directly with Deutsche Bank.
- From 2006 through 2011, Deutsche Bank operated its Global Finance and Foreign Exchange ("GFFX") desk—which includes its Global Finance FX Forwards ("GFF") and foreign exchange ("FX") units—from several offices around the world, including in New York. The GFF unit engaged in pool trading and money market derivatives ("MMD") throughout the Class Period. Deutsche Bank admitted in its NYSDFS Consent Order that "Deutsche Bank AG and the New York Branch manipulated or attempted to manipulate submissions for the London Interbank Offered Rate ("LIBOR"), . . . and Euroyen Tokyo Interbank Offered Rate ("TIBOR") . . . which are benchmark interest rates used in financial markets around the world, by, at times,

submitting rates that would benefit Deutsche Bank's trading positions, rather than rates that complied with the definitions of the rates[.]"²¹

80. Defendant DB Group Services (UK) Limited ("DB Group Services") is a wholly-owned subsidiary of Defendant Deutsche Bank. DB Group Services is incorporated and operates its principal place of business in the United Kingdom. DB Group Services settled with the DOJ, admitting that it employed all of Deutsche Bank's London-based pool and MMD traders that were responsible for manipulating Yen-LIBOR. DB Group Services also pled guilty to felony wire fraud in the District of Connecticut for its involvement in Deutsche Bank's LIBOR manipulation scheme.

G. The HSBC Defendants

81. Defendant HSBC Holdings plc is a United Kingdom public limited company headquartered in London. HSBC Holdings plc is the ultimate parent company of one of the world's largest banking and financial services groups. HSBC Holdings plc and its subsidiaries provide services in 75 countries and territories, with approximately 16,000 employees in the United States. HSBC Holdings plc "is the primary source of equity capital for its subsidiaries and provides non-equity capital to them when necessary." HSBC Holdings plc disclosed approximately \$22.6 billion in profit before tax for the year ended December 31, 2013, with \$8.8 billion in revenue and \$1.221 billion in profit before tax in North America. HSBC Holdings plc and its subsidiaries' "core business lines" within the United States include its Global Markets—Rates Division, which transacts in interest rate swaps and other derivatives. HSBC Holdings plc's American Depository Receipts ("ADRs") are listed on the NYSE.

²¹ Ex. I-5 at 1.

- 82. Defendant HSBC Bank plc is a wholly-owned subsidiary of HSBC Holdings plc that is headquartered and incorporated in England. HSBC Bank plc is a provisionally registered swap dealer with the CFTC. During the Class Period, HSBC Bank plc was a member of the BBA Yen-LIBOR panel. Plaintiff CalSTRS traded Euroyen-based derivatives from within the United States directly with HSBC Bank plc.
 - 83. Collectively, HSBC Holdings plc and HSBC Bank plc are referred to as "HSBC."

H. The ICAP Defendants

- 84. Defendant ICAP plc is the world's largest voice and electronic inter-dealer broker, headquartered and incorporated in the United Kingdom. Defendant ICAP Europe Limited is a wholly-owned subsidiary of ICAP Group Holdings plc, which is a wholly owned subsidiary of Defendant ICAP plc. Collectively, Defendants ICAP plc and ICAP Europe Limited are referred to herein as "ICAP."
- 85. ICAP provides independent brokerage services to commercial banks, investment banks, and other liquidity providers and is active in the wholesale markets for OTC derivatives, fixed income securities, money market products, foreign exchange, and equity derivatives. ICAP maintains dedicated derivatives teams within the United States, in New York and Chicago. ICAP's voice brokerage business, which handles interest rate derivatives and foreign exchange, generated \$792 million in revenue from the Americas during the 2012 fiscal year.
- 86. In a criminal complaint filed in this District against former ICAP brokers Darrell Read, Danny Wilkinson, and Colin Goodman, the DOJ alleges that Read and Wilkinson conspired with former UBS trader, Tom Hayes, through, among other means, electronic chats routed through servers located in New York and that Goodman distributed false run-thrus, or "suggested LIBORs" (*see* IV.C.1.a., *infra*), through U.S. wires to email recipients in New York

and to an ICAP colleague located in the United States.²² In addition, the DOJ alleges Read brokered trades between Hayes and U.S. counterparties located in New York on at least October 24, 2006, November 9, 2006, July 4, 2008, and July 8, 2008.²³

I. The JPMorgan Defendants

- 87. Defendant JPMorgan Chase & Co. is a Delaware corporation with its headquarters in this District at 270 Park Avenue, New York, New York. JPMorgan Chase & Co. provides businesses, institutions, and individuals with investment banking, treasury and securities, asset management, private banking, and commercial banking services. Its U.S.-based dealers trade in the over-the-counter foreign exchange and derivatives markets, which includes interest rate swaps, forward rate agreements, foreign exchange swaps, and currency swaps. ²⁴ JPMorgan Chase & Co. is registered with the Board of Governors of the Federal Reserve System. During the Class Period, JPMorgan Chase & Co. was a member of the BBA Yen-LIBOR panel.
- 88. Defendant JPMorgan Chase Bank, N.A. is a federally-chartered national banking association headquartered in this District at 270 Park Avenue, New York, New York 10017.

 JPMorgan Chase Bank, N.A. is a wholly owned subsidiary of Defendant J.P. Morgan Chase & Co. JPMorgan Chase Bank, N.A. is a provisionally registered swap dealer with the CFTC.

 During the Class Period, JPMorgan Chase Bank, N.A. was a member of the JBA Euroyen

 TIBOR panel. Plaintiff Hayman and Plaintiff CalSTRS traded Euroyen-based derivatives from within the United States directly with JPMorgan Chase Bank, N.A.

²² Ex. C-3 at 2.

 $^{^{23}}$ *Id*.

²⁴ See Federal Reserve Bank of New York 2007 Survey, at 12, 16-17 (JPMorgan participated in the survey as both a foreign exchange dealer and an interest rate derivatives dealer, requiring transactions to be reported "on the basis of the location of the dealer agreeing to conduct the transaction.").

- 89. Defendant J.P. Morgan Securities plc (formerly J.P. Morgan Securities Ltd.) is a subsidiary of Defendant JPMorgan Chase & Co. J.P. Morgan Securities plc provides brokerage and clearing services for exchange-traded futures and options contracts. J.P. Morgan Securities plc is a provisionally registered swap dealer with the CFTC.
- 90. Collectively, J.P. Morgan Chase & Co., JPMorgan Chase Bank, N.A., and JP Morgan Securities PLC are referred to as "JPMorgan".

J. The Lloyds Defendants

- 91. Defendant Lloyds Banking Group plc is a U.K.-based financial services group that provides a wide range of retail and commercial banking services. Lloyds Banking Group plc was formed on January 19, 2009 when Lloyds TSB Group plc (the parent company of Lloyds TSB Bank plc) acquired HBOS plc. After this acquisition, Lloyds TSB Group plc changed its name to Lloyds Banking Group plc, the ultimate parent of Lloyds TSB Bank plc and HBOS. On September 23, 2013, Lloyds TSB Bank plc changed its name to Lloyds Bank plc. Lloyds Banking Group plc's U.S. activities "are primarily undertaken" by the New York branch of Lloyds Bank plc. ²⁵ Lloyds Banking Group plc designates the Lloyds Bank plc New York branch as its "material entity" in the United States. ²⁶ Lloyds Banking Group plc's ADRs are listed on the NYSE.
- 92. Lloyds Bank plc (formerly Lloyds TSB Bank plc) maintains an office in this District at 1095 Avenue of the Americas, New York, New York 10036. Lloyds Bank plc is licensed, supervised, and regulated by the NYSDFS to do business in this state. Lloyds Bank plc is also registered with the Federal Reserve Bank of New York. Lloyds Bank plc is a

²⁵ Resolution Plain 1. Public Section, LLOYDS BANKING GROUP, at 2 (Dec. 31, 2013), available at http://www.federalreserve.gov/bankinforeg/resolution-plans/lloyds-bk-3g-20131231.pdf.

²⁶ *Id*. at 4.

provisionally registered swap dealer with the CFTC. As of 2013, Lloyds Bank plc became the parent company of HBOS, its principal subsidiary. During the Class Period, Lloyds Bank plc was a member of the BBA Yen-LIBOR panel.

93. Collectively, Lloyds Banking Group plc and Lloyds Bank plc are referred to as "Lloyds." In its DOJ settlement, Lloyds admitted that "[s]ome of [its] counterparties to [derivatives transactions tied to LIBOR] were located in the United States. Those United States counterparties included, among others, asset management corporations, mortgage and loan corporations, and insurance companies."²⁷

K. The Mitsubishi UFJ Trust Defendant

- 94. Defendant Mitsubishi UFJ Trust and Banking Corporation ("Mitsubishi UFJ Trust") is a trust and commercial bank that maintains an office in this District at 1121 Avenue of the Americas, New York, 10020. During the Class Period, Mitsubishi UFJ Trust was a member of the JBA Euroyen TIBOR panel. Mitsubishi UFJ Trust and Banking Corporation is licensed, supervised, and regulated by the NYSDFS to do business in this state.
- 95. Mitsubishi UFJ Trust served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Mitsubishi UFJ Trust provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets.

L. The Mizuho Defendants

96. In 2000, three of Japan's largest banks, the Dai-Ichi Kangyou Bank, Limited, The Fuji Bank, Limited, and The Industrial Bank of Japan, Limited consolidated into a bank holding company, Mizuho Holdings, Inc. and formed a new financial services group, the Mizuho

²⁷ Ex. H-1 at A-18.

Financial Group.²⁸ In 2002, as part of Phase 2 of the consolidation, the Mizuho Financial Group reorganized Dai-Ichi Kangyou's, Fuji Bank's, and The Industrial Bank of Japan's operations into Mizuho Bank, Ltd. and Defendant Mizuho Corporate Bank, Ltd.²⁹ During the Class Period, Mizuho Corporate Bank, Ltd. was a member of the JBA Euroyen TIBOR panel and the BBA Yen-LIBOR panel and Mizuho Bank, Ltd. was a member of the JBA Euroyen TIBOR panel.

- 97. Mizuho Corporate Bank, Ltd. served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Mizuho Corporate Bank, Ltd. provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets.
- 98. On December 18, 2006, Mizuho Corporate Bank, Ltd. became a Financial Holding Company in the United States, supervised and licensed by the Board of Governors of the Federal Reserve System. This license permitted Mizuho Corporate Bank, Ltd. to engage in comprehensive investment banking businesses, such as underwriting and dealing of corporate bonds, equities, and other types of securities. Up and until June 28, 2013, Mizuho Corporate Bank, Ltd. was licensed, supervised, and regulated by the NYSDFS to do business in this state.
- 99. On July 1, 2013, the Mizuho Financial Group merged its corporate bank (Mizuho Corporate Bank, Ltd.) and retail bank (Mizuho Bank, Ltd.) into one streamlined bank, Defendant Mizuho Bank, Ltd. (hereinafter "Mizuho Bank").³¹ The merger was an "absorption-type"

²⁸ Foundation of the Mizuho Financial Group ("MHFG") Through the Consolidation of DKB, Fuji Bank, and IBJ, PRESS RELEASE (Dec. 22, 1999), available at http://www.mizuho-fg.co.jp/english/company/info/pdf/19991222release_eng.pdf.

²⁹ Reorganization of the Mizuho Financial Group ("MHFC") --- Announcement of Execution of the Corporate Split Agreement, Mizuho Holdings, Inc. (Jan. 17, 2002), available at http://www.mizuho-fg.co.jp/english/company/info/pdf/20020117release_eng.pdf.

³⁰ Financial Holding Company status obtained in the U.S., MIZUHO (Dec. 19, 2006), available at http://www.mizuhobank.com/company/release/cb/pdf/news_20061219.pdf.

³¹ Start of the New Mizuho Bank, Mizuho (July 1, 2013), available at http://www.mizuhofg.co.jp/english/release/20130701release_eng.html.

merger," whereby Mizuho Corporate Bank, Ltd. was the surviving company and Mizuho Bank, Ltd. dissolved.³² The surviving company's name was changed to Mizuho Bank, Ltd. upon execution of the agreement.³³

York, New York 10020. Mizuho Bank's New York Branch is licensed, supervised, and regulated by the NYSDFS to do business in this state. Mizuho Bank also operates a Los Angeles branch and a San Francisco Representative Office, which are supervised by the Federal Reserve Bank of San Francisco and the California Department of Business Oversight, a Chicago Branch supervised by the Illinois Department of Financial and Professional Regulation, and Atlanta and Houston Representative Offices. Mizuho Bank is Mizuho Financial Group, Inc.'s "material entity" within the United States. Mizuho Bank's New York Branch primarily engages in wholesale commercial banking services, as well as treasury operations, offering foreign exchange, money market instruments, and securities lending. 35

101. Defendant Mizuho Trust and Banking Co. Ltd. is a corporate subsidiary of the Mizuho Financial Group. Mizuho Trust and Banking Co. Ltd. was created when the trust and banking subsidiaries of the three banks, Dai-Ichi Kangyo Fuji Trust & Banking Co., Ltd. and the IBJ Trust & Banking Co., Ltd., merged into one entity. ³⁶ During the Class Period, Mizuho Trust and Banking Co. Ltd. served as a member on the JBA Euroyen TIBOR panel.

³² Memorandum of Understanding on Merger between Mizuho Bank, Ltd. and Mizuho Corporate Bank, Ltd., Mizuho Financial Group, Inc. (Nov. 14, 2011), available at http://www.mizuho-fg.co.jp/english/company/info/pdf/20111114_2release_eng.pdf.

³³ *Id*.

³⁴ *Mizuho Financial Group, Inc. U.S. Resolution Plan 2013 Section 1: Public Section*, Mizuho Financial Group Inc. (2013), available at http://www.federalreserve.gov/bankinforeg/resolution-plans/mizuho-fin-3g-20131231.pdf.

³⁵ *Id.* at 2.

³⁶ Foundation of the Mizuho Financial Group ("MHFG") Through the Consolidation of DKB, Fuji Bank, and IBJ, PRESS RELEASE (Dec. 22, 1999), available at http://www.mizuho-

102. Mizuho Trust and Banking Co. Ltd. served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Mizuho Trust and Banking Co. Ltd. provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets.

M. The Norinchukin Defendant

- 103. Defendant The Norinchukin Bank ("Norinchukin") is a banking and financial services company that maintains an office in this District at 245 Park Avenue, New York, New York 10167-0104. During the Class Period, Norinchukin was a member of the JBA Euroyen TIBOR panel and the BBA Yen-LIBOR panel.
- 104. Norinchukin's New York Branch is licensed, supervised, and regulated by the NYSDFS to do business in this state. Norinchukin considers its New York branch a "material entity" within the United States.³⁷ As of March 31, 2013, the Norinchukin's New York branch had total assets of \$81.1 billion.³⁸ Norinchukin's New York ranch transacts in Euroyen-based derivatives, such as currency swaps and foreign exchange forwards.³⁹
- 105. Norinchukin served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Norinchukin provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets.

N. The Rabobank Defendant

106. Defendant Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A. ("Rabobank") is a financial services corporation that maintains an office in this District at 245 Park Avenue,

fg.co.jp/english/company/info/pdf/19991222release_eng.pdf.

³⁷ U.S. Resolution Plain Section 1: Public Section, THE NORINCHUKIN BANK (Dec. 24, 2013), available at http://www.federalreserve.gov/bankinforeg/resolution-plans/norinchukin-bk-3g-20131231.pdf.

³⁸ *Id.* at 7.

³⁹ *Id*.

37th Floor, New York, New York 10167. During the Class Period, Rabobank was a member of the BBA Yen-LIBOR panel. Rabobank withdrew from the BBA Yen-LIBOR panel in mid-2012.

- 107. Rabobank has banking divisions and branches around the world, including in the United States, with its United States headquarters in New York. Rabobank employs derivatives traders in New York who trade Euroyen-based derivatives, including interest rate swaps. In its 2014 U.S. Resolution Plan, Rabobank declared its New York Branch as its only "material entity" within the United States. Rabobank is licensed, supervised, and regulated by the NYSDFS to do business in this state. Rabobank is also registered with the Federal Reserve Bank of New York, the SEC, the Office of the Comptroller of the Currency, the CFTC, and the Consumer Financial Protection Bureau.
- 108. Rabobank admitted as true in its settlement with the DOJ that "Rabobank employs derivatives traders throughout the world including in New York . . . who trade financial instruments tied to LIBOR . . . including interest rate swaps[.]"

O. The Resona Defendant

- 109. Defendant Resona Bank, Ltd. ("Resona") is a commercial bank and a member of Resona Holdings, Inc. Resona was a member of the JBA Euroyen TIBOR panel during the Class Period.
- 110. Resona served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Resona provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets.

P. The Royal Bank of Scotland Defendants

111. Defendant The Royal Bank of Scotland Group plc is a registered bank holding company. According to The Royal Bank of Scotland Group plc's 2013 U.S. Resolution Plan, the

Group made 20% of its income for the 2012 year in the United States. Defendant The Royal Bank of Scotland plc, a direct subsidiary of The Royal Bank of Scotland Group plc, is a banking and financial services company that maintains an office in this District at 340 Madison Avenue, New York, New York 10173. The Royal Bank of Scotland plc's U.S. Headquarters are located at 600 Washington Boulevard, Stamford, CT 06901. During the Class Period, RBS was a member of the JBA Euroyen TIBOR panel and was a member of the BBA Yen-LIBOR panel.

- 112. The Royal Bank of Scotland plc is licensed, supervised, and regulated by the NYSDFS to do business in this state. The Royal Bank of Scotland plc's Stamford Branch is licensed by the Connecticut Department of Banking ("DOB"). The Royal Bank of Scotland plc is a Clearing Firm on several of the CME Group's Exchanges, including the CME, NYMEX, CBOT, and COMEX, and is a registered swap dealer with the CFTC. The Royal Bank of Scotland plc is also regulated by the Board of Governors of the Federal Reserve System.
- Stamford, Connecticut with U.S.-based counterparties during the Class Period. As part of its Deferred Prosecution Agreement with the DOJ, RBS admitted that "RBS entered into interest rate derivatives transaction tied to Yen . . . with various counterparties, some of which were located in the United States. U.S. counterparties included banks and other financial institutions in the United States or located abroad with branches in the United States. Those counterparties also included, among others, asset management corporations, business corporations, insurance companies, universities, and non-profit organizations." Plaintiff CalSTRS traded Euroyen-based derivatives from within the United States directly with The Royal Bank of Scotland plc.

⁴⁰ RBS Group plc Resolution Plan Pursuant to 12 C.F.R. Parts 217 & 381 and RBS Citizens, N.A. Resolution Plan Pursuant to 12 C.F.R. 360, at i-2 (Jul. 1, 2013).

⁴¹ Ex. B-1 at 38 ¶ 79.

- subsidiary of RBS that functions as a broker-dealer in addition to having market operations. As part of its Plea Agreement with the Fraud Section of the Criminal Division and Antitrust Division of the DOJ, Defendant RBS Japan admitted as true and accurate that "the market for derivatives and other financial products linked to Yen LIBOR is global and is one of the largest and most active markets for such products in the world. A number of these products are traded in the United States such as Yen-based swaps contracts traded over the counter in transactions involving U.S.-based counterparties. For example, more than 15% of the total notional value of the transactions entered into by RBS' Yen derivatives traders from 2006 through 2010 involved U.S.-based counterparties often acting through their overseas offices."
- 115. Defendant RBS Securities Inc. ("RBS Securities"), formerly known as Greenwich Capital Markets, Inc., is a Delaware company with its headquarters located at 600 Washington Boulevard, Stamford, CT 06901. RBS Securities is an SEC registered broker-dealer, a designated Futures Commission Merchant, and a clearing member on the CME, CBOT, NYMEX, and COMEX.
- 116. Collectively, Defendants The Royal Bank of Scotland Group plc, The Royal Bank of Scotland plc, RBS Japan, and RBS Securities are referred to as "RBS."

Q. The R.P. Martin Defendants

117. Defendant R.P. Martin Holdings Limited was a U.K.-based wholesale brokerage firm. Defendant Martin Brokers (UK) Ltd. was a wholly owned subsidiary of Martin Brokers Group Ltd. that brokers cash deposits and derivatives based on Euroyen TIBOR and Yen-LIBOR between banks. R.P. Martin Holdings Limited and Martin Brokers (UK) Ltd. are collectively referred to herein as "R.P. Martin."

R. The Shinkin Defendant

- 118. Defendant Shinkin Central Bank ("Shinkin") is a cooperative financial institution that maintains an office in this District at 655 Third Avenue, New York, New York 10017.

 During the Class Period, Shinkin was a member of the JBA Euroyen TIBOR panel.
- 119. Shinkin's New York Branch is licensed, supervised, and regulated by the NYSDFS to do business in this state. Shinkin opened its New York office in November 1983. Shinkin's New York Branch "[t]ak[es] advantage of its location at the center of global financial activities" by identifying the latest trends in the financial markets, obtaining "vital" information to Shinkin's treasury operations worldwide, and "by providing shinkin banks with information on the fast-changing US economy and financial markets."⁴²
- 120. Shinkin served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Shinkin provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets.

S. The Shoko Chukin Defendant

- 121. Defendant The Shoko Chukin Bank, Ltd. ("Shoko Chukin") is a banking and financial services company that maintains an office in this District at 666 Fifth Avenue, New York, New York 10103-0905. During the Class Period, Shoko Chukin was a member of the JBA Euroyen TIBOR panel.
- 122. Shoko Chukin's New York Branch is licensed, supervised, and regulated by the NYSDFS to do business in this state. Shoko Chukin is also regulated by the Board of Governors of the Federal Reserve System. Shoko Chukin's New York Branch is a "material entity" within

⁴² About SCB, SHINKIN CENTRAL BANK (last accessed Nov. 16, 2015), available at http://www.shinkin-central-bank.jp/e/about/index.html.

the United States because it allows the bank to access the U.S. financial markets.⁴³ Shoko Chukin established its New York Branch in 1986 to facilitate U.S.-based business activities for Japanese clients, as well as to provide lending services to corporate clients.⁴⁴ As of March 31, 2013, the Shoko Chukin New York Branch had \$461 million in total assets.⁴⁵

123. Shoko Chukin served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Shoko Chukin provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets.

T. The Société Générale Defendant

- 124. Defendant Société Générale SA ("Société Générale") is a financial services company that maintains an offices in this District, including at 1221 Avenue of the Americas, New York, New York 10020 and 245 Park Avenue, New York, New York 10167. During the Class Period, Société Générale was a member of the BBA Yen-LIBOR panel.
- 125. Société Générale is licensed, supervised, and regulated by the NYSDFS to do business in this state. Société Générale is also regulated by the Board of Governors of the Federal Reserve System. Société Générale is also a registered swap dealer with the CFTC, a swap firm and guaranteed introducing broker with the National Futures Association, and an OTC clearing firm with the CME Group. Plaintiff CalSTRS traded Euroyen-based derivatives from within the United States directly with Société Générale.
- 126. In Société Générale's 2014 U.S. Resolution Plan, it stated that its core business line within the United States is Global Banking and Investor Solutions, as well as declaring its New York Branch as a "material entity." Société Générale engages in "significant U.S.

⁴³ The 2013 Tailored Resolution Plan Section 1: Public Section, THE SHOKO CHUKIN BANK, LTD., at 3 (2013).

⁴⁴ *Id*.

⁴⁵ *Id*.

activities" in several core business areas—including corporate and investment banking, which includes financial and commodities futures brokerage services. In 1938, Société Générale opened its first U.S. offices and now employs 1,800 corporate professionals in seven U.S. cities.

U. The Sumitomo Trust Defendant

- 127. Defendant The Sumitomo Trust and Banking Co., Ltd. merged with The Chuo Mitsui Trust and Banking Company, Ltd. and Chuo Mitsui Asset Trust and Banking Company, Ltd. in April of 2012, establishing The Sumitomo Mitsui Trust Bank, Limited (hereinafter, "Sumitomo Trust"). Sumitomo Trust maintains a New York Branch ("Sumitomo Trust New York Branch") in this District at 527 Madison Avenue, New York, New York 10022. During the Class Period, The Sumitomo Trust and Banking Co., Ltd and The Chuo Mitsui Trust and Banking Company, Ltd. were members of the JBA Euroyen TIBOR panel.
- 128. The Sumitomo Trust New York Branch is licensed, supervised, and regulated by the NYSDFS to do business in this state. Sumitomo Trust New York Branch is also regulated by the Board of Governors of the Federal Reserve System and because it is a branch of Sumitomo Trust, it is also regulated by the JFSA and Bank of Japan. Sumitomo Trust New York Branch's parent company, Sumitomo Mitsui Trust Holdings, Inc., identified Sumitomo Trust New York Branch as its only "material entity" within the United States. From its New York Branch, Sumitomo Trust enters into derivative contracts, including cross currency and interest

⁴⁶ History The Sumitomo Trust and Banking Co., Ltd., SUMITOMO MITSUI TRUST HOLDINGS, available at http://smth.ip/en/about_us/profile/history/stb/index.html.

⁴⁷ Sumitomo Mitsui Trust Holdings, Inc. Resolution Plan, Section 1: Public Section, at 5 (Dec. 26, 2013).

⁴⁸ *Id*.at 1.

rate swaps priced, settled, and/or benchmarked to Japanese Yen.⁴⁹ Sumitomo Trust New York Branch's customers are predominantly in the United States.⁵⁰

129. Sumitomo Trust served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Sumitomo Trust provided U.S.-based customers access to three-month European futures contracts in European and American time-zone markets.

V. The Sumitomo Mitsui Defendant

- 130. Defendant Sumitomo Mitsui Banking Corporation ("Sumitomo Mitsui") is a Japanese commercial banking company that maintains an office in this District at 277 Park Avenue, New York, New York 10172 ("Sumitomo Mitsui New York Branch"). During the Class Period, Sumitomo Mitsui was a member of the JBA Euroyen TIBOR panel and the BBA Yen-LIBOR panel.
- 131. The Sumitomo Mitsui New York Branch is licensed, supervised, and regulated by the NYSDFS to do business in this state. Sumitomo is also regulated by the Federal Reserve Bank of New York and the Board of Governors of the Federal Reserve System. Sumitomo Mitsui also operates branches in Los Angeles and San Francisco that are supervised by the California Department of Business Oversight and the Federal Reserve Bank of San Francisco, as well as representative office in Houston supervised by the Texas Department of Financial Institutions and the Federal Reserve Bank of Dallas. Sumitomo Mitsui New York Branch a "material entity" for conducting business within the United States.⁵¹ One of the Sumitomo

⁴⁹ *Id.* at 3.

⁵⁰ *Id.* at 4.

⁵¹ Sumitomo Mitsui Financial Group U.S. Resolution Plan Public Section, at 4 (2013).

Mitsui New York Branch's "core business line" is its Trading Department, which primarily focuses on sales and trading of foreign exchange products.⁵²

132. Sumitomo Mitsui served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Sumitomo Mitsui provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets.

W. The Tullett Prebon Defendant

- 133. Defendant Tullett Prebon plc ("Tullett Prebon") is an inter-dealer broker headquartered in London. Tullett Prebon facilitates the trading activities of its clients, in particular commercial and investment banks.
- 134. Tullett Prebon has at least two wholly-owned U.S. subsidiaries, Tullett Prebon Americas Corp. ("Tullett Americas") and Tullett Prebon Financial Services LLC ("Tullett Financial"). Tullett Americas is incorporated in Delaware and operates its main office at 101 Hudson Street, Jersey City, New Jersey 07302-3908. Tullett Financial is incorporated in Delaware and operates its main office at One Seaport Plaza, New York, New York 10038.
- 135. Tullett Americas and Tullett Financial comprise the U.S. arm and alter ego of their corporate parent, Tullett Prebon. In an action filed in the District of New Jersey alleging damages derived from harm to Tullett Prebon's U.S. subsidiaries, Tullett Prebon admitted that "[a]lthough Tullett Prebon is a United Kingdom public company headquartered in London, all of its North American operations are headquartered and based in New Jersey." In its opposition to the defendants' motion to dismiss, Tullett Prebon argued that it was "the real party in interest"

⁵² *Id.* at 6.

⁵³ *Tullett Prebon plc v. BGC Partners, Inc.*, No. 09-cv-05365, ECF No. 39, Memorandum of Law of Plaintiff Tullett Prebon plc In Opposition to Defendant BGC Partners, Inc.'s Motion to Dismiss and Motion to Stay at 10 (Mar. 10, 2010).

when the defendant, BGC Partners, Inc., lured seventy-seven brokers employed by Tullett Prebon's subsidiaries' to join BGC.⁵⁴ Even though BGC's actions were taken against Tullett America and Tullett Financial, Tullett Prebon argued that the raids "caused a direct and distinct injury" to Tullett Prebon and it was "the only party that has standing to recover for certain of the injuries it sustained[.]" Tullett Prebon stated that the raid caused a decline in its market capitalization and "continues to threaten Tullett Prebon with enormous economic and reputational harm." ⁵⁶

X. The UBS Defendants

136. Defendant UBS AG ("UBS") is a banking a financial services company that maintains an office in this District at 1285 Avenue of the Americas, New York, New York 10019. During the Class Period, UBS was a member of the BBA Yen-LIBOR panel and the JBA Euroyen TIBOR panel.

137. In addition to its New York Branch, UBS also maintains branches in Stamford, Connecticut and Miami, Florida. UBS' New York Branch is licensed, supervised, and regulated by the Office of the Comptroller of the Currency ("OCC") and UBS' Stamford Branch is licensed, supervised, and regulated by the DOB. UBS is a provisionally registered swap dealer with the CFTC. UBS is also regulated by the Board of Governors of the Federal Reserve System.

138. In UBS' 2014 Resolution Plan, it designated UBS AG New York Branch and UBS AG Stamford Branch as "material entities," as well as its UBS AG London Branch.⁵⁷ The

⁵⁴ *Id*.

⁵⁵ *Id*. at 3.

⁵⁶ *Id.* at 8.

⁵⁷ 2014 UBS US Resolution Plan Public Section, at 5 (July 2014), available at http://www.federalreserve.gov/bankinforeg/resolution-plans/ubs-1g-20140701.pdf.

Stamford Branch is the center of operations for UBS' Treasury function and payment operations in the United States and the primary booking center for the UBS Investment Bank's foreign exchange business with U.S. clients and U.S. corporate lending businesses. UBS' New York Branch houses its U.S. retail activities of its Wealth Management Americas ("WMA") division and provides investment management and custody service to WMA clients. UBS' shares are registered as Global Registered Shares on the NYSE.

- 139. UBS employs derivatives traders in its Stamford Branch who trade Euroyen-based derivatives, including interest rate swaps.⁵⁸ Plaintiff CalSTRS traded Euroyen-based derivatives from within the United States directly with UBS.
- 140. UBS self-reported its criminal cartel activity to the DOJ pursuant to ACPERA for its admitted manipulation of Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives within the United States. In its settlement with the DOJ, UBS admitted that it "employs derivatives traders throughout the world including in Stamford, Connecticut . . . who trade financial instruments tied to LIBOR . . . and Euroyen TIBOR, including interest rate swaps . . . and Euroyen futures contracts." ⁵⁹
- 141. Defendant UBS Securities Japan Co. Ltd., the successor company to UBS Securities Japan, Ltd. (collectively, "UBS Japan"), is one of UBS' wholly-owned subsidiaries that engages in investment banking and broker-dealer operations. UBS Japan pled guilty to wire fraud, in violation of 18 U.S.C. §§ 1343 and 1342, in the District of Connecticut for its manipulation of Yen-LIBOR on February 25, 2009. UBS Securities Japan Co. Ltd. admitted and acknowledged that it is responsible for the acts of its predecessor company's officers and

⁵⁸ Ex. A-1 at 6.

⁵⁹ *Id*.

⁶⁰ Ex. A-5.

employees. UBS Japan further admitted that "a meaningful portion of the total value of the transactions entered into by [its] most successful Yen derivatives trader from 2007 through 2009 involved U.S.-based counterparties." UBS Japan also admitted that it "entered into interest rate derivatives transactions tied to LIBOR and Euroyen TIBOR – such as derivatives, forward rate agreements, and futures – with counterparties to those transactions. Many of those counterparties were located in the United States. Those United States counterparties included, among others, asset management corporations, mortgage and loan corporations, and insurance companies. Those counterparties also included banks and other financial institutions in the United States or located abroad with branches in the United States." UBS Japan also admitted that on February 25, 2009, one of its derivatives traders asked an inter-dealer broker via electronic chat to influence the Yen-LIBOR submitters at other panel banks. This electronic chat was transmitted through a UBS server in Stamford, Connecticut, using U.S. wires. 61

- 142. Collectively, UBS and UBS Japan are referred to as "UBS."
- 143. The Defendants that served on the JBA Euroyen TIBOR and/or BBA Yen-LIBOR panels during the Class Period are collectively referred to herein as the "Contributor Bank Defendants."
- Euroyen TIBOR Panel. The following Contributor Bank Defendants served on the JBA Euroyen TIBOR panel during the Class Period: (i) The Bank of Tokyo-Mitsubishi UFJ, Ltd.; (ii) Mizuho Bank, Ltd.; (iii) The Sumitomo Trust and Banking Co., Ltd.; (iv) The Norinchukin Bank; (v) Mitsubishi UFJ Trust and Banking Corporation; (vi) Sumitomo Mitsui Banking Corporation; (vii) Resona Bank, Ltd.; (viii) J.P. Morgan Chase Bank, NA; (ix) Mizuho Corporate Bank, Ltd.; (x) Chuo Mitsui Trust & Banking Co. Ltd.; (xi) Deutsche Bank AG; (xii)

⁶¹ *Id.*, Ex. 3 Factual Basis for Plea at 4.

Mizuho Trust and Banking Co. Ltd.; (xiii) The Shoko Chukin Bank, Ltd.; (xiv) Shinkin Central Bank; (xv) UBS AG; (xvi) The Bank of Yokohama, Ltd.; (xvii) The Royal Bank of Scotland Group PLC.; and (xviii) Citibank, Japan Ltd.

- 145. **Yen-LIBOR Panel**. The following Contributor Bank Defendants served on the BBA Yen-LIBOR panel during the Class Period: (i) The Bank of Tokyo-Mitsubishi UFJ, Ltd.; (ii) The Norinchukin Bank; (iii) Sumitomo Mitsui Banking Corporation; (iv) J.P. Morgan Chase & Co.; (v) Mizuho Corporate Bank, Ltd.; (vi) Deutsche Bank AG; (vii) UBS AG; (viii) Société Générale; (ix) The Royal Bank of Scotland Group PLC; (x) Barclays Bank PLC; (xi) Citibank, N.A.; (xii) Rabobank; (xiii) HSBC; (xiv) Lloyds; and (xv) Bank of America.
- 146. The following Contributor Bank Defendants served on both the JBA Euroyen TIBOR and BBA Yen-LIBOR panels during the Class Period: (i) The Bank of Tokyo-Mitsubishi UFJ, Ltd.; (ii) The Norinchukin Bank; (iii) Sumitomo Mitsui Banking Corporation; (iv) J.P. Morgan Chase Bank, & Co./J.P. Morgan Chase NA, (v) Mizuho Corporate Bank, Ltd.; (vi) Deutsche Bank AG; (vii) UBS AG; (viii) The Royal Bank of Scotland Group PLC; and (ix) Citibank, NA/Citibank Japan Ltd.
- 147. Defendants ICAP, R.P. Martin, and Tullett Prebon, along with additional yet-tobe identified derivative and cash broker defendants, are collectively referred to herein as the "Broker Defendants."
- 148. John Doe Defendants Nos. 1-50 are other entities or persons, including banks, inter-dealer brokers, cash brokers and other co-conspirators whose identities are currently unknown to Plaintiffs. The John Doe Defendants participated in, furthered, and/or combined, conspired, or agreed with others to perform the unlawful acts alleged herein, including the

restraint of trade, fixing, and manipulation of Euroyen TIBOR, Yen-LIBOR and the prices of Euroyen-based derivatives.

PERSONAL JURISDICTION

- 149. Defendants engaged in numerous volitional acts within the United States, invoking the benefits and protections of the laws of New York and the United States. By these acts, Defendants availed themselves of the privilege of conducting activities within the United States, including in furtherance of Defendants' conspiracy to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives, and are subject to jurisdiction here.
- 150. For example, Rabobank admitted as true in its settlement with the DOJ that "Rabobank employs derivatives traders throughout the world including in New York . . . who trade financial instruments tied to LIBOR . . . including interest rate swaps[.]"
- 151. This admission was corroborated when Rabobank's Paul Robson and Takayuki Yagami pled guilty in this District for conspiring to commit wire fraud and bank fraud by rigging the Euroyen-based derivatives market.⁶² Robson and Yagami admitted that they understood that American financial institutions would be negatively impacted by their Yen-LIBOR manipulation.⁶³ For example, during his plea allocution, Robson explained:

I tailored the yen LIBOR submissions I made on behalf of Rabobank in order to profit the bank's position . . . I understood the parties taking opposite trading positions could be negatively affected and I knew that some of these parties that could be affected were American financial institution...When I made these submissions designed to favor the bank's trading positions, I knew that it was wrong to do so. ⁶⁴

⁶² Ex. D-7.

⁶³ United States v. Robson, No. 14-cr-272, ECF No. 21 (Sept. 2, 2014); United States v. Yagami, No. 14-cr-272, ECF No. 16 (Jul. 1, 2014).

⁶⁴ United States v. Robson, No. 14-cr-272, ECF No. 21 at 12-13 (Sept. 2, 2014).

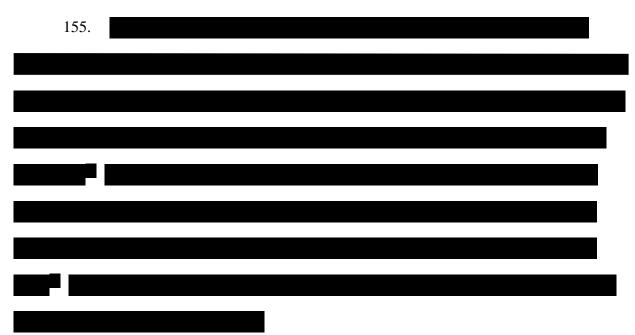
- 152. Rabobank's Anthony Allen and Anthony Conti were found guilty in this District on November 5, 2015 of fifteen counts of wire fraud and conspiracy to commit wire fraud and bank fraud for their roles in manipulating Yen-LIBOR and the prices of Euroyen-based derivatives. Anthony Allen was Rabobank's Global Head of Cash, including Yen, and Anthony Conti was Rabobank's Senior Trader and backup Yen-LIBOR submitter. Testimony from their trial shows that they frequently colluded with New York-based Rabobank employees, including Christian Schluep. Christian Schluep was a Rabobank Yen derivatives trader. Allen's trial testimony demonstrates that he and others at Rabobank knew and intended that the effects of their manipulative conduct were expressly aimed at the United States and U.S. market participants:
 - Q. And you understood that the interest rate swaps involved yen LIBOR, US dollar LIBOR?
 - A. Amongst other currencies, yes.
 - Q. And there are counterparties on the other side of these Rabobank interest rate swaps?
 - A. Yes.
 - Q. Located all over the world?
 - A. Yes.
 - Q. Located here in the US?
 - A. Yes.
 - Q. Located here in New York?
 - A. Yes.
 - * * *
 - Q. And you understood that if the individual on one side of an interest rate swap was manipulating LIBOR, the other side would lose money?

⁶⁵ U.S. v. Robson, Case No. 14-cr-00272 (JSR) (S.D.N.Y.), ECF No. 147.

⁶⁶ See Caroline Binham, Daniel Shafer, and Philip Stafford, *Rabobank to settle over Libor*, FINANCIAL TIMES (Sept. 26, 2013), available at http://www.ft.com/intl/cms/s/60c7e6f4-26d2-11e3-bbeb-00144feab7de.html#axzz3qdSZhNad

A. Yes. 67

- 153. Takayuki Yagami (a Rabobank Yen trader) also testified at the Allen/Conti Trial that he knew manipulating Yen-LIBOR created an "unfair advantage" over his counterparties, including those located in the United States, but he continued to manipulate Yen-LIBOR because it increased his bonus which was based on the performance of his trading books. ⁶⁸
- 154. UBS admitted that it "employs derivatives traders throughout the world including in Stamford, Connecticut . . . who trade financial instruments tied to LIBOR . . . and Euroyen TIBOR, including interest rate swaps . . . and Euroyen futures contracts." ⁶⁹



156. Deutsche Bank admitted in its NYSDFS Consent Order that "Deutsche Bank AG and the New York Branch manipulated or attempted to manipulate submissions for the London

⁶⁷ United States v. Allen, No. 14-cf-272, Transcript of Trial at 1265-1266 ().

⁶⁸ United States v. Allen, No. 14-cf-272, Transcript of Trial at 697 (Oct. 19, 2015).

⁶⁹ Ex. A-1 at 6.

⁷¹

⁷² *Id*.

Interbank Offered Rate ("LIBOR"), . . . and Euroyen Tokyo Interbank Offered Rate ("TIBOR") . . . which are benchmark interest rates used in financial markets around the world, by, at times, submitting rates that would benefit Deutsche Bank's trading positions, rather than rates that complied with the definitions of the rates[.]" For example, Deutsche Bank employed trader Tim Prentice at its New York branch. Prentice conspired with R.P. Martin's Lee Aaron to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives.

157. Deutsche Bank is also subject to jurisdiction because its New York Branch manipulated Yen-LIBOR and the prices of Euroyen-based derivatives from within the United States during weekly telephone calls, termed "Monday Risk Calls." Deutsche Bank AG's manager, David Nicolls, held telephone calls each week, where Deutsche Bank's traders, including those located on its New York-based derivatives trading desk, discussed their trading strategy and trading positions, including its Yen-LIBOR submissions and Euroyen-based derivatives positions. DB Group Services employed all of Deutsche Bank's London-based pool and MMD traders, who also participated on the phone calls and conspired with Deutsche Bank's New York Branch. These Monday Risk Calls continued throughout the Class Period and were one of multiple means by which Deutsche Bank and DB Group Services fixed and manipulated Yen-LIBOR. By manipulating Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives from within the United States, Deutsche Bank and DB Group Services are subject to the jurisdiction of this Court.

⁷³ Ex. I-5 at 1.

⁷⁴ Ex. F-6 at 9.

⁷⁵ Ex. F-6 at 9.

⁷⁶ Ex. I-1 at 27.

- 158. Barclays admitted as true in its DOJ settlement that "Barclays employs derivatives traders in New York, New York and in London, England who trade financial instruments tied to LIBOR and EURIBOR, including interest rate swaps[.]"⁷⁷
- 159. RBS gave its Tokyo-based Yen trader, Jimmy Tan, significant discretion to take risks with his trading book. While it was nighttime in Tokyo, Jimmy Tan passed his Euroyen-based derivatives book to RBS' Neil Danziger in London to continue trading. When the trading day ended in London, Danziger then passed Tan's Euroyen-based trading book to RBS Securities Euroyen-based derivatives trader, David Pieri, at RBS' Stamford, Connecticut branch. Pieri continued trading Jimmy Tan's positions from within the United States. Once business closed in Stamford and the trading day resumed in Asia, Pieri sent the trading book back to Jimmy Tan. This strategy substantially paid off, Jimmy Tan's Yen book generated \$200 million for RBS from 2006 through 2010, based in part on Pieri's trades executed from within the United States.
- 160. Pieri was in involved in RBS' manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives within the United States. For example, on April 2, 2008, Tan messaged Neil Danziger and David Pieri, stating "Nice Libor," "Our six-month fixing moved the entire fising, hahahah." 83

⁷⁷ Ex. G-1 at 5-6.

⁷⁸ Ex. B-3 at 7.

⁷⁹ *Id*.

⁸⁰ Andrea Tan, Gavin Finch and Liam Vaughan, *RBS Instant Messages Show Libor Rates Skewed for Traders*, BLOOMBERG BUSINESS (Sept. 25, 2012), available at http://www.bloomberg.com/news/articles/2012-09-25/rbs-instant-messages-show-libor-rates-skewed-for-traders.

⁸¹ Ex. B-3 at 8.

⁸² *Id*.

⁸³ Andrea Tan, Gavin Finch and Liam Vaughan, *RBS Instant Messages Show Libor Rates Skewed for Traders*, BLOOMBERG BUSINESS (Sept. 25, 2012), available at http://www.bloomberg.com/news/articles/2012-09-25/rbs-instant-messages-show-libor-rates-skewed-for-traders

161. Because RBS' Stamford-based trader, David Pieri, manipulated Yen-LIBOR and traded Euroyen-based derivatives that financially benefitted from RBS' manipulative conduct from within the United States, RBS is subject to jurisdiction in this Court.

The Broker Defendants are subject to personal jurisdiction because they furthered

- Defendants' manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives from within the United States.

 84 Tullett Prebon's brokers, including Mark

 Jones, also conspired with Danziger in Las Vegas, spending long weekends there and planning their manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based
- 163. Additionally, Defendants Bank of America, Bank of Tokyo-Mitsubishi, Barclays Capital, Citigroup, Deutsche Bank AG, HSBC Bank, Merrill Lynch, Mizuho Corporate Bank, RBS, Société Générale, Sumitomo Mitsui, and UBS purposefully availed themselves of the privilege and benefit of trading foreign exchange and/or interest rate derivatives, including

derivatives. 85 Danziger entered a separate series of wash trades with Hayes to generate

commissions to compensate the Tullett Prebon brokers.⁸⁶

162.

⁸⁴

⁸⁵ David Enrich and Jean Eaglesham, *Clubby London Trading Scene Fostered Libor Rate-Fixing Scandal*, THE WALL STREET JOURNAL (May 2, 2013), available at http://www.wsj.com/articles/SB10001424127887323296504578396670651342096?alg=y.

⁸⁶ *Id*.

Euroven-based derivatives, in the United States throughout the Class Period. 87 Every three years, the Federal Reserve Bank of New York conducts a survey of the over-the-counter interest rate derivatives and foreign exchange market. This survey measures the "turnover," or volume of transactions, in foreign exchange and interest rate derivatives within the United States. The Federal Reserve Bank of New York survey only includes data from dealers located within the United States and transactions that are located within the United States. Dealers located outside of the United States report their figures to the central bank where they are located. Defendants Bank of America, Bank of Tokyo-Mitsubishi, Barclays Capital, Citigroup, Deutsche Bank AG, HSBC Bank, Merrill Lynch, Mizuho Corporate Bank, RBS, Société Générale, Sumitomo Mitsui, and UBS each participated in the Federal Reserve Bank of New York's survey of foreign exchange and interest rate derivatives dealers throughout the Class Period, indicating that they entered into foreign exchange and interest rate derivatives transactions, including transactions priced, benchmarked, and/or settled to Yen-LIBOR, from within the United States. At least some of these derivatives transactions were cleared in the United States and sold to U.S. counterparties at artificial prices that were caused by Defendants' misconduct. Defendants intended that those prices would manifest in the U.S. market and in U.S. transactions, harming Plaintiffs and the Class.

164. Hayman Capital Management, L.P. (formerly Hayman Advisors, L.P.)
(hereinafter, "Hayman Capital") is an investment advisor incorporated in Delaware with its principal place of business in Dallas, Texas. Hayman Capital entered into ISDA Master Agreements, on behalf of Hayman Capital Master Fund L.P. ("Hayman Master"), with several

⁸⁷ See The Foreign Exchange and Interest Rate Derivatives Markets: Turnover in the United States, THE FEDERAL RESERVE BANK OF NEW YORK (Apr. 2013); The Foreign Exchange and Interest Rate Derivatives Markets: Turnover in the United States, THE FEDERAL RESERVE BANK OF NEW YORK (Apr. 2007).

Defendants, including: (1) Barclays Bank on March 31, 2008; (2) Deutsche Bank on October 27, 2006; (3) JPMorgan on July 6, 2007; and (4) Merrill Lynch on September 29, 2006.

- 165. Under the Schedule to the Master Agreements, the parties negotiated that the agreement be governed and construed in accordance with New York law. By selecting New York law for the purpose of ¶ 13(a) of the Master Agreements, each party "irrevocably" submitted to the "jurisdiction of the courts of the State of New York and the United States District Court located in the Borough of Manhattan in New York City." Pursuant to ¶ 13(b) of the Master Agreements, "each party irrevocably . . . waives any objection which it may have at any time to the laying of venue of any Proceedings brought in any such court, waives any claim that such Proceedings have been brought in an inconvenient forum and further waives the right to object, with respect to such Proceedings, that such court does not have any jurisdiction over such party."
- 166. Hayman Capital, on behalf of Hayman Master, traded Euroyen-based derivatives from Dallas, Texas with Barclays Bank, Deutsche Bank, JPMorgan, and Merrill Lynch governed by the terms of these ISDA Master Agreements. *See* Part IX.B, *supra*. For example, on April 23, 2010, Hayman Capital, on behalf of Hayman Master, sold Barclays Bank a Yen-LIBOR-based interest rate swaption, giving Barclays Bank the right to enter into an interest rate swap where Hayman Master would pay 3.00% interest on ¥3,600,000,000, in exchange for receiving floating rate payments based on Yen-LIBOR. In another example, on September 7, 2009, Hayman Capital, on behalf of Hayman Master, entered into a Yen-LIBOR-based interest swap with Merrill Lynch, where Hayman Master agreed to pay 1.59875% on ¥4,400,000,000, in exchange for receiving floating rate payments based on Yen-LIBOR, starting on September 7, 2010. On January 21, 2010, Hayman Capital, on behalf of Hayman Master, entered into a Yen-LIBOR, starting on September 7,

LIBOR based payer swaption with Deutsche Bank, giving Deutsche Bank the right to enter into an interest rate swap where Hayman Master would pay 3.0% on ¥3,000,000,000, in exchange for receiving floating rate payments based on Yen-LIBOR.

- 167. By negotiating and signing these ISDA Master Agreements that are governed by New York law and trading Euroyen-based derivatives under the terms of the contracts, Barclays Bank, Deutsche Bank, JPMorgan, and Merrill Lynch could readily have foreseen being haled into this Court for claims relating to those contracts.
- 168. As a general practice, Defendants chose New York law when negotiating and signing ISDA Master Agreements with U.S. counterparties. For example, on September 26, 2007, Barclays Bank entered into an ISDA Master Agreement with U.S. counterparty World Omni Auto Receivables Trust 2007-B, selecting New York state law as the governing law. JPMorgan entered into an ISDA Master Agreement with U.S. counterparty Barnes Group Inc., dated May 5, 2008, selecting New York state law as the governing law. RBS entered into an ISDA Master Agreement with U.S. counterparty Ally Auto Receivables Trust 2010-3, dated August 18, 2010, selecting New York state law as the governing law. Société Générale entered into an ISDA Master Agreement with U.S. counterparty Sabine Pass LNG LP, dated February 25, 2005, wherein the parties selected New York state law as the governing law. UBS entered into an ISDA Master Agreement with counterparty WCM Pool LLC wherein the parties selected New York state law as the governing law. Under the terms of these ISDA Master Agreements, Defendants transacted in Yen-LIBOR-based interest rate swaps and forward rate agreements with U.S. counterparties, subjecting Defendants to jurisdiction and venue in New York for disputes arising under these contracts.

- 169. Defendants Deutsche Bank, Société Générale, Barclays Bank, Rabobank, RBS, Bank of Tokyo-Mitsubishi, Mizuho Bank, Sumitomo Trust, Norinchukin, Mitsubishi UFJ, Sumitomo Mitsui, Bank of Yokohama, Shoko Chukin, Shinkin, and Lloyds Bank also consented to the personal jurisdiction of the United States Courts by registering their New York branch or representative offices with the NYSDFS under New York Banking Law §§ 200 and 200-b. 88 Defendants RBS and UBS consented to personal jurisdiction in the United States by registering with the DOB under Section 36a-428g of the Connecticut General Statutes. In order to benefit from the advantages of transacting business in this forum, these Defendants registered as foreign branches with the NYSDFS and DOB, which confers privileges and benefits and binds these entities to the same judicial constraints as domestic corporations. 89 Deutsche Bank, Société Générale, Barclays Bank, Rabobank, RBS, Bank of Tokyo-Mitsubishi, Mizuho Bank, Sumitomo Trust, Norinchukin, Mitsubishi UFJ, Sumitomo Mitsui, Bank of Yokohama, Shoko Chukin, Shinkin, Lloyds Bank, and UBS promoted the legitimacy of their businesses by registering to do business in New York and Connecticut, and have therefore consented to jurisdiction within this District.
- 170. Defendants additionally purposefully directed their activity at the United States, taking intentional and tortious actions expressly aimed at the forum, transacting business throughout the United States and this District, trading Euroyen-based derivatives, priced, benchmarked and/or settled based on Yen-LIBOR and Euroyen TIBOR with U.S. counterparties. Defendants Barclays, Rabobank, Deutsche, and UBS admitted the following as "true and accurate" in their Statement of Facts incorporated into their various agreements with the DOJ:

⁸⁸ See Vera v. Republic of Cuba, No. 12 Civ. 1596, 2015 U.S. Dist. LEXIS 32846 (S.D.N.Y. Mar. 17, 2015).

⁸⁹ *Id.* at *24-25.

Barclays [Rabobank, Deutsche, and UBS] entered into interest rate derivatives transactions tied to LIBOR and EURIBOR - such as swaps, forward rate agreements, and futures - with counterparties to those transactions. Many of those counterparties were located in the United States. Those United States counterparties included, among others, asset management corporations, retirement funds, mortgage and loan corporations, and insurance companies. counterparties also included banks and other financial institutions in the United States or located abroad with branches in the United States. 90

Defendants knowingly and purposefully directed their price fixing and other manipulative acts to cause an effect in the United States and harm U.S. counterparties to generate illicit profits. Defendants Barclays Bank, Deutsche Bank, JPMorgan, and Merrill Lynch traded Euroyen-based derivatives products with U.S. counterparties, including Plaintiff Hayman. Defendants Bank of America, UBS, Citibank, Deutsche Bank, RBS, HSBC Bank, JPMorgan, Société Générale, and Barclays Bank transacted in Euroyen-based derivatives products with U.S. counterparties, including Plaintiff CalSTRS. Defendants expressly aimed their unlawful fixing and manipulation at increasing the value of their Euroyen-based derivatives in order to gain an anticompetitive financial advantage over U.S. counterparties, including Plaintiffs and the Class, and have therefore subjected themselves to jurisdiction in this District.

Defendants transacted in Euroyen-based derivatives with other U.S. 172. counterparties and reaped illicit profits from within the United States as a result of their manipulative conduct.

⁹⁰ Ex. E-1 at 13-14; Ex. C-1 at 40; Ex. F-1 at 70; Ex. A-1 at 36.



174. Members of the conspiracy to fix and manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives products are also deemed each other's agents and are therefore subject to personal jurisdiction by virtue of participating in a conspiracy with U.S.-based persons and entities. Citibank's principal place of business in New York at 399 Park Avenue, New York, New York 10043. JPMorgan's principal place of business in New York at 270 Park Avenue, New York, New York 10017. Bank of America Corporation's principal place of business at 100 North Tryon Street, Charlotte, North Carolina 28255. Citibank's, JPMorgan's, and Bank of America's acts in furtherance of the conspiracy from within the United States are therefore attributable to their co-conspirators. In addition, RBS', UBS', Barclays',

 Deutsche Bank's, R.P. Martin's, Rabobank's, and Tullett Prebon's tortious acts committed within the forum are attributable to their co-conspirators and subject their co-conspirators to jurisdiction in this District.

- U.S. domestic and interstate wires to accomplish their fixing and manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. Defendants admitted that "[o]n a daily basis, [Defendants], through the transmission of an electronic spreadsheet to Thomson Reuters, knowingly delivered or caused to be delivered its . . . Yen . . . LIBOR . . . submissions through the mails or interstate commerce. [Defendants'] submissions were also caused to be delivered through the mails or interstate commerce through the daily dissemination and publication globally." Defendants knowingly aimed their Yen-LIBOR submissions to the United States when they made their submissions to Thomson Reuters and caused Thomson Reuters to publish a false and artificial rate to investors in the United States, using U.S. wires, through Bloomberg and other financial services platforms.
- 176. Defendants sent electronic chats across U.S. domestic and interstate wires in furtherance of their conspiracy to manipulate Yen-LIBOR and Euroyen TIBOR and fix the prices of Euroyen-based derivatives. For example, Defendant UBS Japan pled guilty to one count of wire fraud in the District of Connecticut, admitting that its employee's February 25, 2009 electronic chat "was transmitted through, among other locations and facilities, a UBS server located in Stamford, Connecticut." 98
- 177. Given the structure of Bloomberg's network, these electronic communications are located within the United States and were transmitted into the United States, crossing U.S. wires,

⁹⁷ Ex. G-2 at 26; Ex. D-2 at 45; A-2 at 52-53; Ex. I-2 at 36; Ex. B-4 at 33.

⁹⁸ A-5 at 4.

through servers located in the United States. Bloomberg transport specifications require that all users connect to internet protocol ("IP") addresses located within the United States in order to access Bloomberg's U.S.-based servers, which are used to send messages in addition to accessing financial information. These servers also host the Instant Bloomberg chat rooms that Defendants' utilized in their scheme.⁹⁹

AGENTS AND UNNAMED CO-CONSPIRATORS

178. Various other entities and individuals, including, but not limited to, dealer subsidiaries and/or affiliates of the Contributor Bank and Broker Defendants participated as co-conspirators and manipulators in the acts complained of and performed acts and made statements that aided and abetted and furthered the unlawful conduct as alleged herein. The unnamed co-conspirators, along with the above-named Defendants, performed, participated in, furthered, and/or combined, conspired, or agreed with others to perform the unlawful acts alleged herein, including the restraint of trade, fixing, and manipulation of Euroyen TIBOR, Yen-LIBOR and the prices of Euroyen-based derivatives.

SUBSTANTIVE ALLEGATIONS

I. Background

A. Euroyen TIBOR and Yen-LIBOR

179. Euroyen TIBOR and Yen-LIBOR are daily reference rates intended to reflect the interest rates at which banks offer to lend unsecured funds denominated in Japanese Yen to other banks in the offshore wholesale money market (or interbank market), also known as the Euroyen market. The higher the credit risk for a bank (or credit risk environment), the higher the rate that

⁹⁹ See Transport and Security Specifications, BLOOMBERG L.P. (Nov. 13, 2014) at 7, 12 (listing Bloomberg IP addresses and diagraming network structure with endpoints in New York and New Jersey).

bank would (and should) have to pay for borrowing unsecured funds denominated in Japanese Yen in the Euroyen market.

- 180. Yen-denominated interest rate issues that settle during European trading hours are generally priced, benchmarked, and/or settled using the BBA's Yen-LIBOR, while Yen-denominated interest rate issues that settle during Asia-Pacific trading hours are generally priced, benchmarked, and/or settled using the JBA's Euroyen TIBOR. However, either rate may be used. *See, e.g.*, ¶¶ 860-869, *infra* (discussing the interrelationship between Euroyen TIBOR and Yen-LIBOR).
- 181. In addition to their use as benchmarks in pricing loans, Euroyen TIBOR and Yen-LIBOR are used as the basis for settlement of interest rate derivatives contracts traded on major futures and options exchanges and in over-the-counter markets. Euroyen TIBOR is used as the final settlement benchmark for three-month Euroyen TIBOR futures contracts, the most actively traded non-U.S. dollar interest rate contract in the world. Billions in notional value of domestic (U.S. based) transactions in Euroyen futures contracts were transacted during the Class Period.
- 182. Euroyen TIBOR is set through the JBA by its member banks. The JBA designates a minimum of eight (8) reference banks to provide daily rate quotes for the calculation of Euroyen TIBOR rates. According to the JBA, "[t]he selection of reference banks is based on four factors: (1) market trading volume..., (2) Yen asset balance, (3) reputation, and (4) track record in providing rate quotes. (The selection also takes into account JBA TIBOR continuity and the variety of financial sectors to which reference banks belong.)."
- 183. Euroyen TIBOR is calculated on each business day as of 11:00 a.m. Tokyo time. Each Euroyen TIBOR reference bank quotes Euroyen TIBOR rates for thirteen (13) maturities (1 week and 1-12 months).

- 184. In calculating Euroyen TIBOR rates, quotes are discarded from the two highest and the two lowest financial institutions and the remaining quotes are then averaged.
- 185. The reference banks quote what they deem to be the prevailing market rates, assuming transactions between prime banks on the Japanese offshore market as of 11:00 a.m., unaffected by their own positions.
- 186. Yen-LIBOR is set through the BBA by its member banks. According to the BBA, each contributor bank is selected to "reflect[] the balance of the market." Each contributor bank is selected based upon the following criteria "the scale of market activity, reputation and perceived expertise in the currency concerned."
- 187. Yen-LIBOR is calculated each business day as of 11:00 a.m. London time. Each Yen-LIBOR contributor bank quotes Yen-LIBOR for fifteen (15) maturities, ranging from overnight to twelve months, including three months.
- 188. In calculating Yen-LIBOR, contributed rates are ranked in descending order and the arithmetic mean of only the middle two quartiles is used to formulate the resulting BBA Yen-LIBOR calculation. The contributor banks respond to the BBA's question: "At what rate could you borrow funds, were you to do so by asking for and then accepting inter-bank offers in a reasonable market size just prior to 11 am?"
- 189. Thomson Reuters serves as the BBA's agent for the collection, calculation, publication, and dissemination of the daily Yen-LIBOR.
- 190. Both the JBA and BBA prohibit banks from reporting rates that reflect factors unrelated to prevailing costs of borrowing unsecured funds in the Euroyen market, *i.e.*, submissions that are based on the banks' Euroyen-based derivatives positions. Notwithstanding this blanket prohibition, the Contributor Bank Defendants, aided and abetted by the Broker

Defendants, systematically reported false Yen-LIBOR and Euroyen TIBOR rates to the BBA and JBA in order to manipulate those rates to artificial levels that financially benefitted their Euroyen-based derivatives positions.

B. Euroyen-Based Derivatives

191. "Euroyen-based derivatives" are financial instruments priced, benchmarked, and/or settled based on, or otherwise affected by, Yen-LIBOR or Euroyen TIBOR. These include, *inter alia*: (i) Yen-LIBOR and/or Euroyen TIBOR interest rate swaps and options on interest rate swaps; (ii) Yen-LIBOR and/or Euroyen TIBOR forward rate agreements; and (iii) Yen foreign exchange forwards.

1. Interest Rate Swaps and Options on Interest Rate Swaps

- 192. Interest rate swaps are the most common type of interest rate derivatives. They are traded over-the-counter, *i.e.*, outside of a public exchange, and allow two counterparties to exchange interest rate payment obligations on an agreed upon "notional" or principal amount. There are several types of interest rate swaps. The simplest interest rate swap is a "plain vanilla" interest rate swap, which involves the exchange of a fixed stream of interest rate payments, *e.g.* 2% per year, for one based on a "floating" reference rate, *e.g.*, Yen-LIBOR, which may change every day.
- 193. The parties to a plain vanilla interest rate swap are typically referred to by their relationship to the stream of fixed interest rate payments. The party exchanging its floating rate obligation for a stream of fixed interest rate payments is known as the "receiver," while the party making fixed interest rate payments in exchange for a stream of payments tied to a floating reference rate is known as the "payer."
- 194. Payment under an interest rate swap is due at regular intervals, *e.g.*, every six months, for the life of the agreement. Each time a payment is due, the amounts owed by the

payer and receiver are netted against each other. Only the party with the larger obligation, fixed or floating, makes a payment reflecting the difference between the two interest rates as applied to the agreed upon notional amount. For example, assume Party A enters into an interest rate swap with Party B and agrees to make a fixed rate payments of 0.5% on ¥10,000,000 to Party B in exchange for receiving floating rate payments based on six-month Yen-LIBOR on the same underlying amount. On each "fixing" or "reset" date, if six-month Yen-LIBOR is lower than the fixed rate, *e.g.*, 0.4%, Party A has the larger obligation and will make a payment to Party B equal to the difference between the fixed and floating rates, in this case 0.1%. However, if six-month Yen-LIBOR is higher than the fixed rate, *e.g.*, 0.6%, Party B has the larger obligation and will make a payment to Party A equal to the difference between the fixed and floating rates.

- 195. The value of an interest rate swap is represented by the difference between the total interest to be paid and received under the swap agreement. For example, if the total present value of interest owed to a party is greater than the total present value of the interest that the party must pay out over the life of the interest rate swap, then the swap has a positive value. As a result, Yen-LIBOR affects the value of Yen-LIBOR-based interest rate swaps by determining the value of the floating rate payments due under that swap contract.
- 196. A "swaption" is an option on an interest rate swap and gives the buyer the right, but not the obligation, to enter into a certain interest rate swap with the swaption issuer on a specified future date, known as the "exercise date."
- 197. The value of a swaption is determined by the value of the underlying interest rate swap. As a result, the value of a swaption that gives the buyer the right to enter into a Yen-LIBOR-based interest rate swap will be affected by a change in Yen-LIBOR because Yen-LIBOR determines the value of the interest rate swap underlying that swaption.

2. Forward Rate Agreement

198. A forward rate agreement ("FRA") is an interest rate forward contract. The contract sets a rate of interest to be paid or received on an obligation beginning at a future start date. The contract will determine the interest rate to be used along with the termination date and notional value. Similar to an interest rate swap, on the settlement date, the party with the larger obligation makes an interest rate payment equal to the difference between the fixed and floating rate. For example, assume Party A enters into a FRA with Party B in which Party A will receive 0.5% interest on \(\frac{1}{2}\)10,000,000. In return, Party B will receive six-month Yen-LIBOR, determined on year in the future, on the same underlying amount. If, after one year, six-month Yen-LIBOR is higher than 0.5%, *e.g.*, 0.6%, Party A must pay Party B the difference in interest, *i.e.*, 0.1%, on the underlying \(\frac{1}{2}\)10,000,000. However, if six-month Yen-LIBOR is lower than 0.5%, Party B must pay Party A the difference in interest.

3. Foreign Exchange Forwards

199. A foreign exchange forward is a derivative in which one party agrees to buy or sell a certain amount of a specified currency, *e.g.*, Yen, from another party on some future date, at a price agreed upon today. The price of a Yen foreign exchange forward is based on Yen-LIBOR, which is used to take the "spot price," *i.e.*, the cost of Yen for immediate delivery, and adjust it to account for the "cost of carry," *i.e.*, the amount of interest paid or received on Yen deposits, over the duration of the agreement. This calculation and thus the value of a Yen foreign exchange forwards is determined by the pricing formula below, ¹⁰⁰ which incorporates Yen-LIBOR as either "Rterm" or "Rbase," ¹⁰¹

¹⁰⁰ See e.g., John W. Labuszewski, Sandra Ro & David Gibbs, *Understanding FX Futures*, CME Group, at 3, 8, http://www.cmegroup.com/education/files/understanding-fx-futures.pdf (hereinafter "Understanding FX Futures") (applying pricing formula to both currency futures contracts and forwards).

¹⁰¹ Foreign exchange forwards and currency futures transactions involve a currency pair, e.g., JPY/USD. In each

Future Price = Spot Price
$$x \left(\frac{1 + [Rterm x (d / 360)]}{1 + [Rbase x (d / 360)]} \right)$$

200. It is well established that derivatives traders use Yen-LIBOR to price Yen foreign exchange forwards because they can borrow short-term funds at the LIBOR quotes of other financial institutions. This is confirmed by the CFTC, which has found in its settlements with Defendants RBS and Rabobank, that Yen foreign exchange forwards are Euroyen-derivatives that are "priced based on" and "priced off of" Yen-LIBOR:

RBS Yen and Swiss Franc derivatives traders traded various derivatives that were **priced based on Yen or Swiss Franc LIBOR**. These products included interest rate swaps, Forward Rate Agreements, **foreign exchange** ("**FX**") **forwards**, cross-currency swaps, overnight index swaps, and tenor basis swaps. ¹⁰³

Rabobank...traders regularly transacted in...derivatives products, including interest rate swaps, forward rate agreements, **foreign exchange forwards**, cross-currency swaps, overnight index swaps, and tenor basis swaps...The position held by the traders were often **priced off of LIBOR**, particularly, U.S. Dollar, **Yen**, and Sterling LIBOR...¹⁰⁴

201.

pair, the first currency listed is referred to as the "Base Currency," while the other is referred to as the "Term Currency." As prices are typically quoted "in terms of" units of the Term Currency, *e.g.*, for JPY/USD the number of dollars per one Yen, the currency listed first will depend on which currency is being purchased/sold by the buyer/seller. The variables Rterm and Rbase in ¶ 199 refer to the rate of interest paid on deposits of the Term Currency and Base Currency, respectively, and will change depending on the order of the currency pair. *See id.* at 3.

¹⁰² See e.g., John C. Hull, OPTIONS, FUTURES, AND OTHER DERIVATIVES (7th Ed., 2009) 74, 112-115.

¹⁰³ Ex. B-4 at 6.

¹⁰⁴ Ex. D-2 at 6.

105

II. <u>Defendants Restrained Trade and Intentionally Manipulated Euroyen-Based</u> <u>Derivatives Prices By Falsely Reporting Euroyen TIBOR and Yen-LIBOR Rates to the JBA and BBA</u>

- 202. Defendants methodically and purposefully manipulated the prices of Euroyen-based derivatives through their deliberate and systematic submission of false Yen-LIBOR and Euroyen TIBOR rates to the JBA and BBA throughout the Class Period. Defendants did so in order to unlawfully profit financially from trading Euroyen-based derivatives held by them or their co-conspirators.
- 203. Each Contributor Bank Defendant's Yen-LIBOR and/or Euroyen TIBOR submitters regularly and improperly conspired with and agreed to change their bank's Yen-LIBOR and/or Euroyen TIBOR submissions at the request of Euroyen-based derivatives traders employed by their bank and/or other Contributor Bank Defendants. As revealed by the Defendants' government settlements, criminal trial of UBS trader Tom Hayes, criminal trial of Rabobank traders Anthony Allen and Anthony Conti, and criminal trial of multiple inter-dealer brokers employed by the Broker Defendants, this was an open, common and pervasive practice on each Contributor Bank Defendant's trading desk. Traders frequently discussed their requests for false submissions and other manipulative conduct before sending them to their Euroyen TIBOR and/or Yen-LIBOR submitters. For example, Rabobank traders had a standing meeting each morning known as "LIBOR Time" where they openly planned to make false Yen-LIBOR submissions. As a direct, intended and proximate consequence of the Contributor Bank

⁰⁵

Defendants' unlawful conduct, the Contributor Bank Defendants manipulated the prices of Euroyen-based derivatives to artificial levels throughout the Class Period.

- 204. Each Contributor Bank Defendant's interest rate derivatives traders also regularly and improperly conspired with each other, with traders at other Contributor Bank Defendants, and with brokers employed by the Broker Defendants to coordinate their false Yen-LIBOR and/or Euroyen TIBOR submissions. By coordinating their Yen-LIBOR and/or Euroyen TIBOR submissions, Defendants maximized the manipulative and anticompetitive impact of their submissions on Yen-LIBOR and/or Euroyen TIBOR. This coordination financially benefited Contributor Bank Defendants by increasing the value of their Euroyen-based derivatives positions.
- 205. Defendants knew that the BBA and JBA used the false rates Defendants submitted to calculate and publish Yen-LIBOR and Euroyen TIBOR. Defendants also knew that their false Yen-LIBOR and Euroyen TIBOR submissions, in addition to false resulting Yen-LIBOR and Euroyen TIBOR fix, were published and distributed electronically throughout the world, including within the United States using U.S. wires. Defendants also knew, as sophisticated market participants, that their false Yen-LIBOR and Euroyen TIBOR submissions impacted the prices of Euroyen-based derivatives traded by U.S. investors, who used the daily Yen-LIBOR and Euroyen TIBOR fix to price, benchmark and/or settle their Euroyen-based derivatives transactions.

III. Defendants Restrained Trade and Manipulated the Prices of Euroyen-Based Derivatives By Their Illegitimate, Non-Bona Fide Trading of Euroyen-Based Derivatives

206. As alleged herein, Defendants traded Euroyen-based derivatives at times they knew the prices of such financial instruments were being distorted by Defendants' systematic false reporting of Yen-LIBOR and Euroyen TIBOR (among other unlawful collusive and

manipulative conduct). This destroyed the legitimate price discovery function of Euroyen-based derivatives, created or contributed to prices which were not reflective of legitimate forces of supply and demand, and furthered Defendants' conspiracy to manipulate and unlawfully restrain trade in and fix the prices of Euroyen-based derivatives to artificial levels during the Class Period to the detriment of Plaintiffs and the Class. Because Defendants' positions were illegitimate and manipulative parts of the supply-demand equation for Euroyen-based derivatives, Defendants' impact on Euroyen-based derivatives was necessarily an artificial one that restrained trade and caused artificial prices.

207. Defendants' derivatives traders, by knowing their Euroyen-based derivatives positions, knew the amount of their exposure to movements in Yen-LIBOR and Euroyen TIBOR. For example, on any given day, the derivatives traders may have had exposure to Yen-LIBOR and/or Euroyen TIBOR in particular maturities if payments were owed to or by them on interest rate swaps or FRA settling on that day. The amount owed to or by the traders was affected by movements in Euroyen Yen-LIBOR and/or Euroyen TIBOR. A beneficial movement could have made the derivatives traders a profit or reduced a loss. In the foregoing context, each Defendant's derivatives traders repeatedly communicated with the Yen-LIBOR and/or Euroyen TIBOR submitters at that Defendant and others in order to cause their firm to make false Yen-LIBOR and/or Euroyen TIBOR submissions that favored the traders' Euroyen-based derivatives positions.

IV. <u>Defendants' Unlawful Conduct Has Led to Deferred Criminal Prosecution Agreements, Criminal Charges, Guilty Pleas and Settlements Resulting in the Payment of Fines and Penalties in Excess of \$7 Billion to Governmental Authorities in the U.S. and Abroad</u>

208. Defendants' unlawful conduct has resulted in agreements with government regulators and the collective payment of over **\$7 billion** in fines and penalties to date (among other relief) by Defendants UBS (\$1.5 billion), RBS (\$964 million), ICAP Europe Limited

(\$104.8 million), Rabobank (\$1 billion), R.P. Martin (\$2.5 million), Deutsche Bank (\$2.5 billion), Lloyds (\$269 million), JPMorgan (\$108 million), Citigroup (\$94 million) and Barclays (\$450 million) for their manipulation of Yen-LIBOR and/or Euroyen TIBOR (among other rates) and the prices of Euroyen-based derivatives.

- 209. The settlements resolve DOJ, CFTC, FSA, NYSDFS and EC criminal and/or civil charges relating to restraints of trade and manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. The factual findings that accompanied the UBS, RBS, Rabobank, Barclays, Lloyds, and Deutsche Bank settlements each included a "Statement of Facts" ("SOF") attached to, and incorporated by reference in, various non-prosecution or deferred prosecution agreements entered with the DOJ's Criminal Division, Fraud Section.

 UBS, RBS, Rabobank, Barclays, Lloyds, and Deutsche Bank, respectively, admitted that the contents of the SOF included with their settlement was "true and accurate."
- 210. Defendants created an environment that promoted, indeed encouraged and rewarded, pervasive manipulative and collusive misconduct. Throughout the Class Period, the Contributor Bank Defendants and Broker Defendants used several principal and interrelated methods to manipulate Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives including: (i) falsely reporting their own Yen-LIBOR and/or Euroyen TIBOR submissions; (ii) colluding with cash brokers, including the Broker Defendants, to influence other Contributor Banks' Yen-LIBOR and/or Euroyen TIBOR submissions; and (iii) colluding directly with Euroyen-based derivatives traders and submitters (among others) at other Yen-LIBOR and/or Euroyen TIBOR Contributor Banks, either directly or through the Broker Defendants, in order to manipulate Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives.

- A. <u>Defendants Created an Environment Ripe For the Pervasive and Persistent Manipulation of Yen-LIBOR, Euroyen TIBOR and the Prices of Euroyen-Based Derivatives</u>
 - 1. The Contributor Bank Defendants Created Inherent Conflicts of Interest that Corrupted their Yen-LIBOR and Euroyen TIBOR Submission Process and Facilitated Their Unlawful Manipulation and Collusion
- 211. The driving force behind Defendants' manipulation of Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives was simple: greed. Because of the high notional value of Euroyen-based derivatives, even very small movements in Yen-LIBOR and/or Euroyen TIBOR would have a significant positive impact on the profitability of the Contributor Bank Defendants' Euroyen-based derivatives positions, and a correspondingly negative impact on their counterparties' (including U.S. counterparties') trading positions. Thus, because traders' compensation was based in part on the profit and loss calculation of the Contributor Bank Defendants' trading books, the manipulation of prices of Euroyen-based derivatives provided a substantial financial benefit to their traders' compensation.
 - a. Defendants Permitted Traders Whose Compensation Was Directly Linked to Their Success in Trading Euroyen-Based Derivatives – To Improperly Influence Their Yen-LIBOR and Euroyen TIBOR Submissions.

i. UBS.

212. Until August 2008, UBS had no specific internal controls or procedures governing its Yen-LIBOR and Euroyen TIBOR submissions to manage conflicts of interest or ensure that its submissions did not take into account impermissible factors, such as UBS' Euroyen-based derivatives positions. UBS provided no training concerning the benchmark interest rate submission process or how to manage the inherent conflict between making such submissions, and the fact that the trader-submitters were supposed to make money for UBS.

- 213. UBS made trader-submitters who worked in UBS' Investment Banking Division responsible for making all benchmark interest rate submissions. From at least January 2005 through September 2009, derivatives traders, who sat on Short Term Interest Rate ("STIR") trading desks in Zurich and traded short-term derivatives products, made submissions for Yen-LIBOR and Euroyen TIBOR. UBS' derivatives traders traded many Euroyen-based derivatives, including, Yen-LIBOR and Euroyen TIBOR-based interest rate swaps, FRAs, and futures contracts. Many of their derivatives contracts settled or reset on IMM dates, which made the Yen-LIBOR and Euroyen TIBOR rates on these particular dates especially important.
- 214. The STIR desk generated significant income for UBS by trading derivatives products, whose value depended on Yen-LIBOR and Euroyen TIBOR. STIR also managed UBS' short-term cash position and engaged in cash trading in the money markets for each currency, including Yen, primarily through traders located in Connecticut, Zurich and Singapore. STIR was also responsible for managing UBS' interest rate risk.
- 215. Even after conducting a limited review and developing some procedures for its U.S. Dollar LIBOR submission process in mid-to-late 2008, UBS did not remove the inherent conflicts of interest as alleged herein or provide any training to their trader-submitters. Rather than strengthening internal controls and removing the inherent conflicts of interest, UBS delegated oversight responsibility for Yen-LIBOR and Euroyen TIBOR submissions to managers who not only knew that derivatives traders and trader-submitters were engaged in efforts to manipulate Euroyen TIBOR, Yen-LIBOR and the prices of Euroyen-based derivatives, but who also made requests for submissions to benefit their own individual Euroyen-based derivatives trading positions. Certain derivatives traders, trader-submitters and managers completely disregarded the few procedures UBS eventually implemented.

- 216. In September 2009, UBS transferred responsibility for determining Yen-LIBOR submissions to Asset and Liability Management ("ALM") located in Zurich. In January 2010, ALM also became responsible for UBS' Euroyen TIBOR submissions.
- 217. Prior to September 2009, ALM pushed the trader-submitters to consider directions that the Yen-LIBOR and Euroyen TIBOR rates should move and eventually provided the trader-submitters with the exact rate ALM wanted them to submit. After ALM assumed such responsibility, other UBS derivatives traders continued to demand false Yen-LIBOR and Euroyen TIBOR submissions. The ALM submitters improperly considered input from UBS traders along with the previous day's submissions in determining their daily rate submissions.
- 218. By allowing interest rate derivatives traders to act as both trader and rate submitter, UBS created an inherent conflict of interest that compromised the integrity of UBS' rate submission process, and established an environment ripe for derivatives traders and trader-submitters to abuse. UBS' trader-submitters had significant financial interests to make Yen-LIBOR and Euroyen TIBOR submissions that benefited their Euroyen-based derivatives trading positions. UBS' trader-submitters' financial interests were in direct conflict with UBS' duty to make honest and reliable assessments of Yen-LIBOR and Euroyen TIBOR rates, and ensure its submissions were made in accordance with BBA and JBA criteria.
- 219. This environment enabled certain derivatives traders to engage in widespread, long-term systematic misconduct to manipulate Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives within UBS, and in concert with other Contributor Banks and interdealer brokers.

ii. RBS.

220. Until March 2012, certain London-based money market traders were responsible for making RBS' Yen-LIBOR submissions. RBS money market traders were also responsible

for ensuring that the bank met its funding needs each day in all currencies, including Yen. To do so, RBS money market traders engaged in both intra-bank and inter-bank borrowing and lending transactions. RBS money market traders also traded derivatives products that were indexed to, and therefore priced based on, Yen-LIBOR. One money market trader, Paul White, was primarily responsible for making RBS' Yen-LIBOR submissions ("Primary Submitter"), though other traders also made RBS' Yen-LIBOR submissions.

- 221. RBS Yen-LIBOR submitters considered certain market information in determining RBS' Yen-LIBOR submissions, such as RBS' funding needs, money market transactions, and derivatives prices, "market color" communications with derivatives traders (although against BBA guidelines), information from inter-dealer brokers, arbitrage transactions, and synthetic cash deposits in various currencies. RBS' submitters also improperly considered the value of their own Euroyen-based derivatives positions, and those of other RBS traders, in making false Yen-LIBOR submissions to financially benefit those positions.
- 222. RBS Euroyen-based derivatives traders traded various Euroyen-based derivatives that were priced, benchmarked, and/or settled based on Yen-LIBOR, including interest rate swaps and foreign exchange forwards, which were used to manage the desk's interest rate risk and also to generate a profit for the desk. Indeed, the statement of RBS Senior Yen Trader, Jimmy Tan ("Tan"), makes this motivation clear: "[I]ts [sic] just amazing how libor fixing can make you that much money." Many of RBS' Euroyen-based derivative settled or reset on IMM dates. RBS' derivatives trading books were traded 24 hours a day, from RBS trading desks in the United States, U.K., and Asia under the direction of the RBS Yen Manager and the RBS Senior Yen Trader. Tan was assisted by a Yen derivatives trader in Connecticut, David Pieri,

and Yen Trader 1, Neil Danziger ("Danziger") located in London. Danziger also was the backup Yen-LIBOR submitter.

- 223. In October 2006, RBS senior management decided to facilitate collusive communications between derivatives traders and money market traders, some of whom were also Yen-LIBOR submitters, by locating them on the same RBS currency trading desks. This colocation plan was known as the Short-Term Markets Desk ("STM"). The express purpose of STM was to encourage derivatives and money market traders to communicate about the relevant market conditions that could impact trading and funding decisions. The seating arrangement, however, exacerbated the preexisting conflict of interest between the profit motive of traders and the responsibility of submitters to make accurate Yen-LIBOR submissions that reflected RBS' cost of borrowing Yen in the inter-bank market. RBS did not provide any guidance or controls over what constituted appropriate communications between the derivative traders and money market traders in charge of Yen-LIBOR submissions. The result was an environment where the RBS Yen traders were able to seize opportunities to manipulate Yen-LIBOR for RBS' and their individual financial benefit.
- 224. RBS' Euroyen-based derivatives traders quickly took advantage of this new arrangement. RBS' Euroyen-based derivatives traders routinely told the Primary Submitter their trading positions and pushed him to make artificial Yen-LIBOR submissions that would make their Euroyen-based derivatives positions more profitable. If the Primary Submitter was not at the desk, the traders made written demands to submit artificial Yen-LIBOR via Bloomberg chats or instant messages.

- 225. Substitute submitters also ensured that the Yen-LIBOR submissions were beneficial either to the Euroyen-based derivatives held by other RBS traders, or Euroyen-based derivatives positions held in RBS' Yen money market trading book.
- 226. STM was in place formally until mid-2008 and continued informally for Yen traders into 2009. In the spring of 2009, the trading floor was reorganized, and the derivatives traders and submitters were separated onto different desks. The seating change did not reduce the amount of manipulative conduct at RBS. When they were no longer in close proximity to RBS' Yen-LIBOR submitters, RBS' Euroyen-based derivatives traders increased their use of Bloomberg chats and instant messages to continue demanding artificial Yen-LIBOR submissions that benefitted their Euroyen-based derivatives positions, which were frequently accommodated.

iii. Rabobank.

- 227. From mid-2005 through early 2011, Rabobank failed to recognize and address conflicts of interest, and failed to adequately supervise its derivatives traders and submitters. Further, Rabobank did not have any policies, internal controls or procedures for determining, monitoring or supervising its Yen-LIBOR submissions to ensure that Rabobank's submissions reflected an honest assessment of the costs of borrowing unsecured funds in the interbank market.
- 228. Rabobank assigned responsibility for making its LIBOR submissions to individuals who traded both cash and derivatives products. In 2004, Rabobank combined its money market desks (which were responsible for cash trading) with its short-term derivatives trading desk. These traders regularly transacted in interbank cash deposits and loans to meet the bank's daily funding needs in all currencies, including Yen, and in Euroyen-based derivatives products, including interest rate swaps, forward rate agreements, foreign exchange forwards, cross-currency swaps, overnight index swaps, and tenor basis swaps. The traders engaged in

derivatives transactions not only to hedge risk, but also to generate profits for Rabobank and themselves. Yen-LIBOR submissions, by definition, should reflect only the costs of borrowing in the relevant markets, and not derivatives trading positions. By assigning the Yen-LIBOR submissions to derivative traders whose profits depended upon the fixings of Yen-LIBOR, Rabobank created an inherent conflict of interest.

- 229. This conflict of interest was heightened by the fact that Rabobank had its LIBOR submitters sitting next to and working with the other derivatives traders on trading desks. One dominant derivatives trader simply shouted his requests across the desk to the submitters.
- 230. Even Rabobank managers and at least one senior manager expected the traders and submitters to communicate their individual trading positions. A senior manager in London ("Senior Manager 1"), who was Rabobank's representative to the BBA, oversaw cash and derivatives traders, including the traders responsible for Rabobank's Yen-LIBOR submissions. A former LIBOR submitter himself, Senior Manager 1 encouraged communication among the traders and submitters, and even instructed one Yen-LIBOR submitter to contact derivatives traders in another office to obtain the rates to submit each day. Traders, submitters and Rabobank Senior Manager 1 openly discussed individual trading positions across the trading desks, and also utilized Bloomberg chat and email to provide each other with instant and continuous written communication about such positions. This free flow of information and the encouragement of managers ensured that submitters would improperly make Yen-LIBOR submissions beneficial to Rabobank traders' derivatives trading positions.
- 231. Because of the submitters' dual role as submitters and traders, and the open communication policy promoted by senior managers, which encouraged the sharing of information about trading positions, several submitters routinely used their own and other traders

Euroyen-based derivatives trading positions when determining their Yen-LIBOR submissions and thereby skewed their Yen-LIBOR submissions to manipulate Yen-LIBOR. In addition, certain submitters and traders coordinated, at times, with inter-dealer brokers employed by the Broker Defendants and traders from at least two other Contributor Bank Defendants to manipulate Yen-LIBOR.

- 232. By failing to separate responsibilities for the Yen-LIBOR submissions from its trading functions, Rabobank created an inherent conflict of interest that incentivized submitters to prioritize profit over their responsibility to make accurate Yen-LIBOR submissions that reflected Rabobank's cost of borrowing Yen in the inter-bank market. Rabobank created, and its Euroyen-based derivatives traders took full advantage of, an environment that yielded unfettered opportunities to manipulate Yen-LIBOR submissions to financial benefit their Euroyen-based derivatives positions. This is exemplified by the widespread nature of Rabobank's manipulative conduct, which involved over two dozen traders, including desk managers, and the knowing involvement of at least one senior manager.
- 233. In April 2010, Rabobank received the CFTC's request to conduct an internal investigation of its U.S. Dollar LIBOR practices. During this investigation, a Rabobank senior manager informed submitters that it was inappropriate for derivatives traders to provide the rates to submit for Yen-LIBOR. Despite an admonishment resulting from the internal investigation, Rabobank failed to improve its internal controls or monitor its traders. Rabobank traders continued their manipulation of Yen-LIBOR through the use of brokers into early 2011.
- 234. Rabobank's failure to provide internal controls to address benchmark interest rate submissions, allowance of inappropriate communications between traders and Rabobank's

submitters, and financial incentive to manipulate the rates amplified the pattern of misconduct, which continued for a number of years.

235. At the Allen/Conti criminal trial, Rabobank's traders and submitters testified that this seating structure permitted them to make undocumented requests for false Yen-LIBOR submissions. Lee Bruce Stewart, a former Rabobank trader who pled guilty to conspiracy to commit wire fraud and bank fraud, in this District testified that "the vast majority" of requests for false submissions were made in person or verbally, not in writing:

<u>Government [Young]</u>: Can you tell us of the times that you made LIBOR requests, what portion of your requests were in writing and what portion of your requests were in in person or verbally?

<u>Rabobank [Stewart]</u>: The majority would be done in just over the desk, so not in writing.

<u>Government [Young]</u>: Could you tell us how big of a majority, a percentage maybe or a portion?

Rabobank [Stewart]: The vast majority 106

236. Takayuki Yagami was a Yen derivatives trader at Rabobank. During the Allen/Conti Trial, Yagami testified that as time went on, he started to actively conceal his requests for false Yen-LIBOR submissions by using the telephone to avoid making requests in writing:

Rabobank [Yagami]: The telephone call, we are talking about – the main reason I wanted to find out who was responsible for setting LIBORs was I wanted to know whether I can still request the yen LIBORs based on my positions. But I knew by then that I cannot ask or cannot write an email – I knew by then that I was – I should be more careful about being subtle, so I did not write e-mail to ask Mr. Tony Conti whether I can still keep requesting LIBORs based on our positions.

¹⁰⁶ United States v. Allen, 14-cr-272, Transcript of Trial at 246-47 (Oct 19, 2015).

<u>Government [Slipperly]</u>: When Mr. Conti says, so if it suits you for us to go a bit higher or a bit lower, I am sure that is not a problem at all. What did you understand him to be telling you?

<u>Rabobank [Yagami]</u>: I understood that if I have preferences beyond LIBOR submissions, higher or lower, I can still request the setter to do so. And it is not a problem, not a problem. ¹⁰⁷

iv. Lloyds

- 237. Lloyds assigned its money market traders to submit the bank's LIBOR submissions. These traders were charged with raising wholesale funds for Lloyds in various currencies. These traders also traded LIBOR-based derivatives, including Euroyen-based derivatives that were priced, benchmarked and/or settled based on Yen-LIBOR and Euroyen TIBOR.
- 238. Throughout the Class Period, and up until March 2011, Lloyds did not have any internal controls governing procedures for making Yen-LIBOR submissions. Lloyds did not (1) undertake any efforts to review the integrity of its Yen-LIBOR submission process; (2) put in place any systems or policies detailing the proper process for submitting Yen-LIBOR submissions; (3) provide any training to its submitters on appropriate and inappropriate information to consider when making LIBOR submissions; and (4) monitor its own submissions.
- 239. Lloyds linked its trader-submitter bonuses in part to the profit and loss of its Money Markets Desk. The profits and losses of the Money Market Desk were impacted by LIBOR, including Yen-LIBOR, as LIBOR was used for reference rates in large new cash transactions, and where LIBOR was fixed determined the profitability of the cash transactions. Further, LIBOR also affected the traders' management of existing borrowing and lending facilities. In sum, traders could greatly improve the desk's profitability (and thus improve their

¹⁰⁷ United States v. Allen, 14-cr-272, Transcript of Trial at 694-95 (Oct. 22, 2015).

bonuses) by manipulating LIBOR, including Yen-LIBOR, to financially benefit these transactions. Lloyds failed to develop procedures that would prevent its trader-submitters from taking into account their money market trading positions in setting Lloyds' Yen-LIBOR submission.

240. Lloyds' failure to implement controls and account for the risks involved with its traders setting Yen-LIBOR led to pervasive manipulation of Yen-LIBOR by Lloyds, including collusion with Rabobank to set Yen-LIBOR to benefit the banks' trading positions at the expense of the Class.

v. Deutsche Bank

241. Deutsche Bank did not have any LIBOR-specific systems and controls in place governing its LIBOR submissions throughout the Class Period. It did not keep records of which employees made its Yen-LIBOR and Euroyen TIBOR submissions, or of the rationale behind those submissions, nor did it train its employees regarding how to make submissions. Instead, Deutsche Bank promoted a company culture of increasing profits without concern for the overall integrity of the market, including awarding bonuses and promoting employees based on the profits and losses of their trading books. In For example, two LIBOR traders, Christian Bittar and Carl Maine, generated extraordinary profits for Deutsche Bank. Senior management, including Anshu Jain, the future co-CEO of Deutsche Bank, regarded them as "the best people on the street" and "the best guys [Deutsche Bank's] got." As a result, Bittar, the "guaranteed money maker," and Maine were generously compensated, receiving a combined €130 million bonus based on their 2008 performances alone.

¹⁰⁸ Ex. I-5 at 14.

¹⁰⁹ *Id*.

- 242. Starting in 2006, to increase Deutsche Bank's profits, Anshu Jain (then, the Global Head of Global Markets) and Alan Cloete (the Global Head of Global Financial and Foreign Exchange Forwards) merged the bank's pool trading and money market derivatives ("MMD") desks, creating the Global Financial and Foreign Exchange Forwards ("GFFX") desk. Deutsche Bank's GFFX desks operated in various offices around the world, including within the United States from Deutsche Bank New York Branch. The sole purpose of creating this seating structure was to make it easier for Deutsche Bank's traders and submitters to communicate regularly so that its LIBOR submitters, including Yen-LIBOR and Euroyen TIBOR, would be aware of the false rates they needed to submit to financially benefit each of the bank's trading positions. This seating strategy, while inherently creating a conflict of interest, proved incredibly profitable for Deutsche Bank, with its MMD desk alone generating €1.9 billion in 2008 and €2.9 billion in 2009.
- 243. Upon creating the GFFX desk, Deutsche Bank also implemented a new trading strategy, focused on the "spread" or difference between certain LIBOR tenors, including Yen-LIBOR. Deutsche Bank's traders capitalized on the relationship between tenors by entering into "massive derivatives basis trading positions" which increased in value as they manipulated the spread between tenors wider.
- 244. Deutsche Bank educated its traders and submitters to ensure that this plan was well known and utilized across currency desks, including those that traded Euroyen-based derivatives. David Nicholls, the Head of Global Finance Europe and other senior traders from Deutsche Bank's London, New York, Tokyo, and Frankfurt GFFX desks held weekly meetings,

¹¹⁰ Ex. I-1 at 8; Ex. I-6 at 13, 17, 22.

¹¹¹ Ex. I-6 at 5.

¹¹² *Id*. at 6.

termed "Monday Risk Calls," where they openly discussed the use of this trading strategy so that everyone involved understood the plan. As a result, the CFTC found that Deutsche Bank's LIBOR submitters, including those who made Deutsche Bank's Yen-LIBOR and Euroyen TIBOR submissions, routinely built this spread "bias" into Deutsche Bank's LIBOR submissions, manipulating the spread between different tenors of LIBOR wider, even in the absence of written communications from traders requesting a specific false rate.

245. Deutsche Bank further facilitated its employees' LIBOR manipulation by assigning a single employee with the responsibilities of making Deutsche Bank's Yen-LIBOR and Euroyen TIBOR submissions and trading Euroyen-based derivatives, which created an inherent conflict of interest. From 2008 through 2009, a senior Yen trader, Guillaume Adolph, referred to as "Trader-11" in Deutsche Bank's and DB Group Services' DOJ settlements and "Senior Yen Trader-Submitter" in Deutsche Bank's CFTC settlement, made Deutsche Bank's Yen-LIBOR submissions and traded Euroyen-based derivative products. Prior to Adolph, two DB Group Services employees, Submitter-2 and Submitter-3, were responsible for making Deutsche Bank's Yen-LIBOR submissions and trading Euroyen-based derivative products from 2006 through 2007. 115

246. This and other conflicts of interest went unnoticed as Deutsche Bank did not have a formal policy about conflicts of interest among traders and submitters relating to its benchmark submissions until February 2013, almost three years after government regulators began their probe into Deutsche Bank's LIBOR-related misconduct. By merging the responsibility of

¹¹³ Ex. I-3 at 11.

¹¹⁴ Ex. I-1 at 47.

¹¹⁵ See Ex. I-4 at 27 (DB Group Services employed all of Deutsche Bank's London-based traders).

¹¹⁶ Ex. I-2 at 4.

trading Euroyen-based derivatives and making Yen-LIBOR and Euroyen TIBOR submissions into the same desk (and sometimes even the same person), Deutsche Bank intentionally created an environment that provided significant opportunities and incentives to manipulate Yen-LIBOR and Euroyen TIBOR.

2. Defendants Lacked Internal Controls To Oversee Their Involvement in the Yen-LIBOR and Euroyen TIBOR Submission Process and To Monitor Their Communications With Other Banks and Brokers.

a. ICAP.

- 247. During the Class Period, ICAP failed to implement adequate internal controls and procedures to govern its Yen brokers' communications and interactions with clients and prospective clients. Nor did it adequately supervise and oversee its Yen brokers and the Yen and Cash Desks.
- 248. ICAP used a regional-based system of policies, procedures, and controls that applied to all ICAP plc subsidiaries during the Class Period. Further, ICAP did not have its own chief compliance officer. A single person served as the dedicated chief compliance officer for all ICAP plc subsidiaries, including ICAP. This system of compliance failed to detect and deter the wrongful conduct of the ICAP brokers.
- 249. ICAP's regional compliance system lacked internal controls, policies and procedures to guide and monitor Yen brokers in their communications with clients, or the provision of market information to clients and other Contributor Panel banks. Furthermore, ICAP did not have procedures for approving the dissemination of market information, or for verifying the basis for the market information being disseminated by ICAP brokers.

 Accordingly, as alleged in further detail below, "ICAP Cash Broker 1," Colin Goodman, was able to send out the skewed "Suggested LIBORs" in daily "Run Thru" emails, which were

distributed to Euroyen-based derivatives traders and Yen-LIBOR submitters at multiple banks, without detection. $See \P\P 386-403$, infra.

- 250. ICAP's Yen and Cash Desks were inadequately supervised. The Yen brokers, including the "ICAP Yen Desk Head," Danny Wilkinson, worked with little to no supervision from senior ICAP management. Goodman, the only Yen cash broker at ICAP, operated independently with little to no supervision from the head of the Cash Desk. Likewise, ICAP left compliance oversight to the Yen and Cash Desk Heads who were expected to report any suspicious conduct to ICAP's compliance officer. This system of compliance and supervision was of course all but useless as the Yen Desk Head Wilkinson was an active participant in the misconduct taking place on the Yen Desk.
- 251. These compliance flaws were exacerbated by the fact that the Yen Desk was not perceived as a potential compliance risk, and was not subjected to any compliance reviews or audits during the Class Period. Because there were no audits of the Yen Desk for more than four years, ICAP did not discover that: (1) former UBS and Citibank Senior Yen Trader Hayes was "Derivatives Broker 1," Darrell Read's, exclusive client and a significant source of revenue for the ICAP Yen Desk; (2) the ICAP Yen brokers regularly engaged in the manipulation of Yen-LIBOR on behalf of former UBS and Citibank Senior Yen Trader Hayes; and (3) ICAP successfully negotiated a special bonus from UBS to pay Goodman for "LIBOR services" which were in fact services to disseminate false market information intended to benefit the Euroyen-based derivatives positions of UBS Senior Yen Trader Hayes.
- 252. ICAP's failure to provide specific internal controls and procedures to determine permissible market information to be provided by its Yen brokers to clients and others, and the

overall lack of supervision of the Yen and Cash Desks, allowed the misconduct to continue unabated throughout the Class Period.

b. R.P. Martin.

- 253. R.P. Martin failed to establish an adequate compliance function, failed to adequately supervise and oversee its Yen brokers and the Yen Desk, and failed to implement adequate internal controls and procedures to govern its Yen brokers' communications and interactions with clients and prospective clients.
- 254. Prior to February 2010, R.P. Martin did not have a compliance office or compliance department. Instead, R.P. Martin assigned employees from other departments to handle compliance issues on a part-time basis. For example, R.P. Martin's head of compliance consisted of an inexperienced officer who had other responsibilities that were in conflict with his compliance duties.
- 255. R.P. Martin also failed to ensure that staff were adequately trained and supervised. Staff received little to no compliance training. Further, Desk Heads were given little instruction regarding their roles and responsibilities in supervising the brokers on their desks. Instead, brokers routinely raised concerns and issues directly with senior management, who had earned the reputation of prioritizing the happiness of profitable brokers over ensuring a compliant environment. Senior Management dealt with broker complaints as they arose, rather than ensuring proactive supervision of brokers and desk heads. R.P. Martin's currency desks, including the Yen Desk, were inadequately supervised. The Yen brokers, including the Yen Desk Head Terry Farr, worked with minimal supervision from senior management.
- 256. As part of this insufficient system of compliance, R.P. Martin did not have adequate internal controls, policies, and procedures to guide and monitor Yen brokers in their

communications with clients, or the provision of market information or market color, or for verification of the basis for the market information being disseminated by R.P. Martin brokers. Accordingly, although the improper communications between former UBS and Citibank Senior Yen Trader Hayes, and R.P. Martin Yen brokers were well-known by most, if not all, of the brokers on the Yen Desk, no one informed compliance or senior management that such improper conversations were taking place.

- 257. R.P. Martin's lackadaisical attitude toward compliance was evident when the company became aware of UBS' improper broker compensation activity. The R.P. Martin manager who monitored back-office brokerage activity on a daily basis immediately noticed an unusually large amount of commissions generated from "wash trades," in which the same financial instrument was purchased and sold, occurring between UBS and RBS. However, when he questioned the Yen Desk about these trades, at least one Yen broker said to him, "You really don't want to know." The R.P. Martin manager discussed the wash trades with at least one member of R.P. Martin senior management but the discussion did not generate any action, and no one at R.P. Martin further investigated why RBS and UBS had agreed to generate unusually large wash trade commissions for the R.P. Martin Yen Desk.
- 258. R.P. Martin's lack of specific internal controls and procedures related to external communications, such as what market information Yen brokers can appropriately send to their clients as well as its overall failure to supervise the Yen Desk, allowed the misconduct to continue unabated.

c. Deutsche Bank

259. Starting in August of 2007, Deutsche Bank's MMD desk's profits skyrocketed.

MMD revenue alone more than quadrupled, increasing from €399 million in 2007 to over €1.9

billion, or roughly 14% of the bank's *total* revenue, in 2008. 117 Despite this giant red flag, Deutsche Bank's management did not order an internal investigation for well over a year. When Deutsche Bank's Global Head of Global Markets, Anshu Jain, finally launched an investigation in January of 2009, he requested that William Broeksmit, the Head of Capital and Risk-Optimization, look at whether the MMD desk's profits were real or caused by false valuations or internal transactions (the "Broeksmit Investigation"). The Broeksmit Investigation was not intended to uncover the source of these abnormally large profits, *i.e.*, Deutsche Bank's pervasive LIBOR manipulation, but rather only inquired into whether the money represented by these profits actually existed. Because of the limited nature of the Broeksmit Investigation, Deutsche Bank continued to profit from its LIBOR manipulation.

260. In another 2009 investigation, Deutsche Bank's Co-Chief Operating Officer in Global Markets, Henry Ritchottes, requested that the Business Integrity Review Group ("BIRG") conduct a review into whether Deutsche Bank's profits were a fraud (the "BIRG Review"). Deutsche Bank assigned only one person, Mr. Mulcany, with the task of reviewing a tremendous amount of documents (over 800,000). Many of these documents were written in French, a language that Mr. Mulcany did not speak. The BIRG Review further failed because it used an incomplete list of search terms, failed to detect many of the important later-discovered communications, and lacked any independence as Mr. Cloete, the head of the very division that was being investigated, was allowed to make changes to the report before it was passed off. On November 30, 2009, Mr. Cloete further compromised the BIRG Report, making "the situation appear better" by removing all compliance-related topics before it was presented to the

¹¹⁷ *Id.* at 9 n.16.

¹¹⁸ Ex. I-6 at 21

¹¹⁹ *Id*. at 10.

Management Board, ensuring that Deutsche Bank would not implement any measures to restrict the GFFX desk's profits. 120

261. Both of these investigations were inadequate responses to the major red flags that Deutsche Bank's LIBOR-submission process raised. As a result, Deutsche Bank's traders and submitters continued to manipulate Yen-LIBOR and Euroyen TIBOR without any consequences.

d. UBS

- 262. UBS also did not have any systems or controls in place to monitor its LIBOR submission process, which permitted its traders and submitters to manipulate LIBOR. 121 When UBS' Compliance department launched an internal review of its LIBOR submission processes and procedures (the "2008 Review"), 122 it chose to limit its 2008 Review solely to U.S. Dollar LIBOR, ignoring the likely possibility that its traders and submitters, whom management placed next to each other on the STIR desk, were involved in manipulating LIBOR for multiple currencies, a reality confirmed by UBS' guilty plea to wire fraud in connection with its LIBOR-related misconduct. 123
- 263. To ensure the 2008 Review did not uncover LIBOR-related misconduct, UBS'
 Compliance department placed one of its own LIBOR submitters in charge. This created a direct
 conflict of interest, giving the submitter an opportunity to conceal any misconduct that might get
 him or his co-workers in trouble. For example, the LIBOR submitter selected to lead the 2008
 Review had himself received at least one request for a false LIBOR submission during the

¹²⁰ *Id.* at 21, 24.

¹²¹ Ex. A-1 at 34.

¹²² *Id.* at 27.

¹²³ United States v. UBS AG, Plea Agreement, No. 15-cv-76, ECF No. 6, at 1.

relevant period. ¹²⁴ Proof that the 2008 Review was a sham, the LIBOR submitter found nothing wrong with UBS' USD LIBOR submission process even though he had direct knowledge that UBS' traders were manipulating LIBOR. ¹²⁵ UBS' Compliance department naïvely terminated its limited inquiry into the LIBOR submitting process at the bank, permitting UBS' LIBOR manipulation to continue without consequence.

264. To give the appearance that UBS was making a serious effort to end LIBOR-related misconduct, Compliance decided in August 2008 that it was finally time to draft formal procedures and guidelines (the "2008 Guidelines") for UBS' LIBOR submission process. The 2008 guidelines, like the 2008 Review, were also a sham and never actually circulated to UBS' employees. UBS' Compliance department only drafted them as a protective measure, in the event they were ever questioned about what procedures they had in place. The 2008 Guidelines were illusory, and neglected to address key failures within the bank's LIBOR submission process: the inherent conflicts of interest (*e.g.*, assigning trading and submitting responsibilities to the same individual at the STIR desk) and lack of training for LIBOR submitters on how to properly calculate UBS' daily LIBOR submission.

265. The 2008 Guidelines also created an "exception reporting regime" intended to give the appearance that UBS actively monitored its LIBOR submissions for false reporting. Under this new system, compliance was to make weekly comparisons of UBS' LIBOR submissions to UBS' actual cost of borrowing and/or the published LIBOR for the day. Large differences would be considered "exceptions" and flagged for further review. While this sounded reasonable, compliance configured the exception reporting regime to only be triggered

¹²⁴ Ex. A-3 at 28.

¹²⁵ See, e.g., id.

¹²⁶ *Id.* at 29-30.

by extremely large differences between UBS' LIBOR submission and actual cost of borrowing, effectively neutering the system. As a result, despite UBS' admitted false reporting in multiple LIBOR currencies throughout the Class Period, the exception reporting regime did not detect a single false LIBOR submission while it was in place. 127

- 3. The Contributor Bank and Broker Defendants' Yen Desk Managers Were Active Participants in the Pervasive and Persistent Manipulation of Yen-LIBOR, Euroyen TIBOR and Euroyen-Based Derivatives Prices by Their Traders, Submitters and Brokers
 - a. UBS.
- LIBOR, Euroyen TIBOR and Euroyen-based derivatives prices by their derivatives traders. For example, former Senior Yen Trader Hayes' manager knew, at least as early as 2007, that internal pressure was placed on UBS' Yen-LIBOR and Euroyen TIBOR submitters, to contribute submissions to financially benefit the Yen trading book. Further, certain Zurich-based managers and more senior managers heading the derivatives desks in all currencies were informed of the pressure the Yen trading desk placed on the Yen-LIBOR submitters to contribute submissions that would benefit UBS and their traders' Euroyen-based derivatives positions.
- 267. For example, the FCA determined (a) at least four UBS Managers were directly involved in making requests for false submissions to UBS' Yen-LIBOR and/or Euroyen TIBOR submitters; (b) at least three other Managers and least four Senior Managers were aware that requests for false Yen-LIBOR and/or Euroyen TIBOR submissions UBS traders were making; (d) at least one Manager was directly involved in making requests for manipulative conduct to Broker Defendants; (e) at least one other Manager was aware that UBS was making requests for manipulative conduct to Broker Defendants; (f) at least three Managers were aware that requests

¹²⁷ *Id.* at 29.

for false Yen-LIBOR and/or Euroyen TIBOR submissions were made to other Contributor Bank Defendants; and (g) at least one Senior Manager was aware that requests for false Yen-LIBOR and Euroyen TIBOR misconduct with other Contributor Bank Defendants. In total, requests to manipulate Yen-LIBOR directly involved approximately 40 individuals at UBS, 11 of whom were managers. Furthermore, the practice of submitting false Yen-LIBOR submissions to benefit Euroyen-based trading positions was often openly discussed between certain individuals in open chat forums and in group emails, which included at least 70 individuals at UBS.

268. UBS managers were also on notice of UBS Senior Yen Trader Hayes' communications with his counterpart traders and Yen-LIBOR submitters at other Contributor Panel Banks about obtaining favorable and artificial Yen-LIBOR submissions to benefit his Euroyen-based derivatives positions. In a July 3, 2009 email, UBS Hayes' manager, in an attempt to keep Hayes from leaving for another bank, lobbied other UBS managers to award a sizable bonus to Hayes. In the email, Hayes' manager listed some of his attributes, such as "strong connections with Libor setters in London. This information is invaluable for the derivatives books." This email was sent to a senior manager of the Investment Bank in Zurich, who forwarded it to derivatives desk managers, asking for their input. One manager replied:

[Hayes] does also know some of the traders at other banks (from his London days) but personally I find it embarrassing when he calls up his mates to ask for favours on high/low fixings . . . it makes UBS appear to manipulate others to suit our position; what's the legal risk of UBS asking others to move their fixing?

269. Despite these communications to UBS managers and senior managers, no one at UBS disciplined or even reprimanded Hayes, and no one referred the matter to compliance. Hayes continued working as a derivatives trader at UBS until he left following a compensation dispute in September 2009 to work for Defendant Citibank Japan.

- 270. The majority of UBS Yen-LIBOR and Euroyen TIBOR submitters, Yen derivatives traders, and their supervisors, as well as the more senior managers at UBS who were aware of this conduct, knew that making Yen-LIBOR and Euroyen TIBOR submissions was inappropriate, yet continued to encourage, allow, and participate in this conduct. For example, Hayes' manager, a senior manager in the Investment Bank, the primary Yen-LIBOR and Euroyen-TIBOR submitters, and other derivatives traders knew it was contrary to the definition of Yen-LIBOR and Euroyen TIBOR to consider derivative trading positions in making their Yen-LIBOR or Euroyen TIBOR submissions. On October 9, 2008, "Submitter-1" Roger Darin complained to several other managers that: "one of the things we signed up for when UBS agreed to join the fixing panel was the condition that fixing contributions shall be made regardless of trading positions."
- 271. As an active participant in the manipulation of the Euroyen rates, a UBS derivatives desk manager sought to obstruct the investigation of the LIBOR manipulation. For example, in December 2010, Submitter-4, the UBS derivatives desk manager who supervised Rolf Keiser ("Submitter-2") in 2009, instructed Keiser to lie to UBS attorneys during the investigation. Among other things, the UBS manager instructed Keiser to (a) falsely claim that the UBS Yen trading desks did not have any derivative positions with exposure to Yen-LIBOR; (b) avoid mentioning Hayes; (c) falsely indicate that the Yen-LIBOR submission process did not take into account trading positions; (d) falsely claim that they never moved the Yen-LIBOR submissions to benefit the Yen trading desks; (e) falsely claim that when contributing Yen-LIBOR submissions, UBS tried to be "as close to the market as possible."

b. RBS.

- 272. At least two RBS managers were aware of significant conflicts of interest with derivatives traders acting as backup Yen-LIBOR submitters. Moreover, one of these managers was aware of, and at times participated in, the manipulation of the RBS Yen-LIBOR submissions by derivatives traders.
- 273. For example, on August 22, 2007, Manager-1 (employed by Defendant RBS Japan at this time) Jezri Mohideen became aware that "Trader-2," Neil Danziger, who acted as a backup Yen-LIBOR submitter that day, made RBS' submission for his own benefit. Mohideen asked, "Hi Mate, where are u calling the 6m and 3s Libor today?" Danziger responded, "i put in 1.05 and 1.15." Mohideen said "ok cool. . . is that close to consensus?" to which Danziger responded, "i think my 3s are too high . . . 6s will prob be 1.13 too . . . but i wanted high fixes today." Later, Danziger asked, "well let me know if you have any preferences . . . each day." Jezri Mohideen responded, "thx will do."
- 274. In an electronic chat on December 3, 2007, Jezri Mohideen communicated his own requests for the direction of Yen-LIBOR to "Trader-3," Will Hall, with whom he shared a Yen trading book. Mohideen said to Hall, "for choice we want lower libors... let the MM [money market] guys know pls." Hall responded that he was serving as the submitter that day "as [Trader-2] and cash guy off." Mohideen then said "great. . . set it nice and low." Hall suggested 1.02 "or lower" for the six-month Yen-LIBOR submission, to which Mohideen responded, "yeh lower." Hall indicated that he could go down one more basis point to 1.01, which he did making RBS the lowest of all Contributor Panel Banks whose Yen-LIBOR submissions were counted in that day's fixing.

c. Rabobank.

- 275. Rabobank "Submitter-3" as identified in the Rabobank DOJ SOF, was Rabobank's Global Head of Liquidity and Finance, Anthony Allen. Anthony Allen was the head of Rabobank's money market desk in London, directly supervising other Rabobank Yen-LIBOR Submitters. Anthony Allen knew that requests were made to Rabobank's Yen-LIBOR submitters to contribute false submissions to benefit swaps traders' trading books, and he not only tolerated such activity, but directly participated in it.
- 276. Rabobank "Trader-9" later replaced Anthony Allen as the Global Head of Liquidity and Finance, previously having served as the Head of Liquidity and Finance for Europe. Trader-9 was the head of Rabobank's money market desk in Utrecht, directly supervising other Rabobank LIBOR Submitters. Trader-9 was informed that Rabobank "Trader-5," Takayuki Yagami, would forward requests to the submitters under Trader-9's supervision, but Trader-9 did not act to stop such conduct. Further, many of the submitters under Trader-9's supervision were not trained to calculate LIBOR submissions, which increased the ability for traders to exert substantial influence on the submitters and for Yagami to take over the Yen-LIBOR setting process.
- 277. In addition, Rabobank's "Trader-6," Tetsuya Motomura, was the head of Global Financial Markets Trading for Tokyo and, starting in October 2008, the head of Global Financial Markets for Tokyo. Tetsuya Motomura directly supervised numerous Rabobank traders who made numerous requests to Rabobank's Yen-LIBOR submitters to financially benefit their trading books. Tetsuya Motomura also made numerous requests to Rabobank's Yen-LIBOR submitters to benefit his own trading book, was aware of the fact that Takayuki Yagami made similar requests, and directed Takayuki Yagami to make requests on Tetsuya Motomura's behalf.

278. Further, Rabobank's "Trader-4," Paul Thompson, was the Head of Money

Markets and Derivatives Trading for Northeast Asia and the Head of Local Currency Trading for

Asia Pacific, eventually being promoted to Head of Liquidity and Finance for Asia Pacific in

November 2010. Paul Thompson not only was aware of the fact that Takayuki Yagami made

requests to Rabobank's Yen-LIBOR submitters to benefit his Euroyen-based derivatives trading

book, but Paul Thompson previously made numerous such requests on his own behalf.

d. Lloyds.

279. At least four managers at Lloyds were aware of Yen-LIBOR manipulation by its submitters, how the scheme functioned, and the profits the scheme would generate for the bank. In one example, on July 19, 2007, a Lloyds trader-submitter and a manager discussed a request from a Lloyds trader for a low Yen-LIBOR submission. In relaying the request, the trader-submitter remarked that "every little helps . . . It's like Tescos," an ironic play on the slogan of the British multinational grocery and merchandise retailer known for providing a good value and taking care of its customers. Quite the opposite occurred here; Lloyds' profit-making scheme took advantage of the Yen-LIBOR manipulation to provide value to Lloyds at the expense of its customers and the public. The Lloyds manager agreed with the trader-submitter's sentiments, replying "Absolutely every little helps."

e. Deutsche Bank

280. At Deutsche Bank, its managers were not only aware of the bank's Yen-LIBOR and Euroyen TIBOR manipulation, they participated in it. For example, on September 4, 2009, a Deutsche Bank vice president cautioned Yen-LIBOR submitter Guillaume Adolph against making an accurate Euroyen TIBOR submission because the other Contributor Bank Defendants, like UBS and JPMorgan, were submitting lower rates. Instead of submitting an accurate rate, the

vice president instructed a trader to lower Deutsche Bank's Euroyen TIBOR submission, directing in a message:

am purring 34 for 3m libor and I think am far too high... JPM [JP Morgan Chase] is putting 41 for tibor... I do not understand how come we can have 3m tibor/cash at 56 at DB... DB is the among the lowest libor contribution in all ccys... UBS is corrup/manipulator in tabor fixing... i think putting such a high tibor damage the reputation of deutsche bank... Second, It is not because all the tibors setters are corrupt/manipulators that deutsche bank has to be aswell... It is not because the japanese banks are manipulating the tibor fixing that DB has to do it as well... *Tibor is a corrupt fixing and DB is part of it!* 128

281. Deutsche Bank's management went so far as to facilitate requests for false submissions by soliciting requests from its traders, passing them along to the submitters, and following-up to ensure that the favorable submissions were made. ¹²⁹ For example, in the following communication, the Tokyo Regional Manager reached out to a Deutsche Bank Yen-LIBOR submitter to inquire to whom he should direct his requests for false submissions, the right person was the Senior Yen LIBOR Submitter. Another manager, Yen Desk Manager, had to pass along the request for high one-month and six-month Yen-LIBOR submissions because the Senior Yen LIBOR Submitter did not answer the Tokyo Regional Manager's phone call.

December 21, 2006:

<u>Tokyo Regional Manager</u>: are you doing libors today, esp JPY or is [Senior Yen LIBOR Submitter]?

<u>Junior Yen LIBOR Submitter</u>: shld be [Yen Desk Manager] setting, let him know yr axes . . . i'll be inputting next week if need anything then mate

<u>Tokyo Regional Manager</u>: [Senior Yen Trader-Tokyo] will BBG you next week if he needs anything .. cheers mate

Follow-up instant message to Yen Desk Manager the same day:

¹²⁸ Ex. I-5 at 12-13.

¹²⁹ Ex. I-2 at 23.

<u>Tokyo Regional Manager</u>: is [Senior Yen LIBOR Submitter] in or are you doing JPY libors today?

Yen Desk Manager: [Senior Yen LIBOR Submitter] is doing it

<u>Tokyo Regional Manager</u>: he is not picking [Senior Yen Trader-Tokyo] up... could you ask him to go high in 1m and 6m?¹³⁰

B. <u>Defendants Successfully Manipulated Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives.</u>

- 1. Through Their False Reporting of Yen-LIBOR and Euroyen TIBOR, Among Other Unlawful Conduct, the Contributor Bank and Broker Defendants Successfully Manipulated Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives.
 - a. UBS.¹³¹
- 282. Over a period of approximately six years, from at least January 2005 through at least June 2010, UBS Derivatives Traders and Trader-Submitters engaged in sustained, wideranging, and systematic efforts to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives to benefit UBS' trading positions. This conduct encompassed, among other things, hundreds of instances in which UBS employees sought to influence benchmark rates. During some periods, UBS employees engaged in this activity on nearly a daily basis.
- 283. For example, the CFTC determined that UBS Derivatives Traders made approximately 2,000 written requests of UBS' trader-submitters, traders at other panel banks and inter-dealer brokers to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. The written requests of the UBS Derivatives Traders occurred on approximately 570 trading/reporting days, mostly between late 2006 and late 2009, which is approximately 75% of the days UBS participated in the submissions.

¹³⁰ *Id.* at 24.

¹³¹ See also Ex. A-2 at 11-17.

- 284. Former UBS Senior Yen Trader Hayes made at least 800 requests in writing, on UBS' email and chat systems, to the UBS trader-submitters for adjustments to UBS' Yen-LIBOR submissions, usually focusing on the one-month, three-month and six-month tenors. Hayes and others acting on his behalf also made similar demands for adjustments to the Euroyen TIBOR trader-submitters to benefit his and UBS' Euroyen-based derivatives trading positions. Sometimes, Hayes made requests to benefit the trading positions of other UBS Yen Derivatives Traders on the desk, if it happened that Yen-LIBOR or Euroyen TIBOR fixings would not impact his own positions.
- 285. UBS' submission of false Yen-LIBOR and Euroyen TIBOR to benefit UBS derivatives traders' positions began to occur far more frequently after July 2006, when UBS hired Hayes. Beginning in September 2006, and continuing until soon before he left UBS in September 2009, Hayes, and occasionally other UBS Yen derivatives traders, regularly requested that UBS Yen-LIBOR submitters contribute Yen-LIBOR submissions to benefit their trading books. Hayes and his colleagues engaged in this conduct on the majority of total trading days during this more-than-three-year period.
- 286. UBS' Yen derivatives traders' requests typically were for the one-month, three-month, and six-month tenors for Yen-LIBOR and Euroyen TIBOR. The trader-submitters on many occasions acquiesced to those requests and made Yen-LIBOR and Euroyen TIBOR submissions with the purpose of benefiting UBS' derivative trading positions. The requests were made over UBS' email or chat networks and additional requests were made orally by traders who sat near to or spoke by telephone with trader-submitters, with traders at other banks or with brokers. In addition, certain trader-submitters based submissions at times on his or her own or the desk's trading positions, without consulting with anyone else.

- 287. Multiple UBS traders and submitters, including Hayes' supervisor, were aware of Hayes' efforts to manipulate Yen-LIBOR and Euroyen TIBOR through his internal requests to the submitters. UBS managers in Tokyo and Zurich also were aware of Hayes' requests. The UBS managers encouraged and allowed Hayes to engage in his conduct, which ended only when he decided to leave UBS following a pay dispute. No one involved in or aware of the misconduct reported it as wrongful to more senior management, or to UBS' compliance or legal departments. On the contrary, some of these individuals, including Hayes' Yen Desk Manager in Tokyo, Mike Pieri, engaged in the same misconduct by making their own requests to UBS' Trader-Submitters for the manipulation of Yen-LIBOR and Euroyen TIBOR, or facilitating Hayes' requests.
- 288. During his criminal trial, Hayes confirmed that his managers were fully aware of his manipulation, stating: "I acted with complete transparency to my employers. My managers knew, my manager's manager knew. In some cases the CEO [chief executive] was aware of it[.]" 132
- 289. In making requests, Hayes at times identified the tenor and/or direction for which he sought assistance, using terms such as "low 1m" (indicating that he wanted a low submission for the Yen-LIBOR one-month tenor submission), "high 3m" (for the three-month Yen-LIBOR submission) or "unchanged." The requests were so common that Hayes sometimes merely asked for the "usual axe on libors," meaning his typical requests. Certain trader-submitters also understood that Hayes had a "standing order," meaning Hayes had a preference for a higher or lower submission and that this preference remained in operation for a period of several days, if

¹³² Mark Broad, *Libor trader: Who is Tom Hayes?* BBC NEWS (Aug. 3, 2015), available at http://www.bbc.com/news/business-33635340.

not longer. Moreover, UBS trader-submitters sometimes initiated contact with Hayes to see if he needed any adjustments made to the Yen-LIBOR submissions.

- 290. Hayes also sometimes emphasized to UBS' trader-submitters when one of his requests was particularly important, such as by saying he had a "big fix" or even a "massive fix." At times, Hayes was more specific, quantifying the potential benefit to UBS' derivatives position: "have 385b 6m fix today so really need it low ... half a point is 10mjpy!" As Hayes once exclaimed to the UBS Senior Yen Trader-Submitter, Roger Darin: "I live and die by these libors, even dream about them." (Emphasis added).
- UBS Yen trader-submitter indicated that he would at times adjust his submissions by up to several basis points to accommodate Hayes' requests. The requests and accommodations occurred on a regular basis even after UBS had received the CFTC Division of Enforcement's demand in October 2008 for information and documents relating to UBS' U.S. Dollar LIBOR submissions.
- 292. For example, on Monday, November 20, 2006, Hayes reached out to the UBS Yen-LIBOR "Submitter-3," Joachim Ruh, who was substituting for the regular "Submitter-1," Roger Darin, that day: "hi . . . [Roger] and I generally coordinate ie sometimes trade if ity [sic] suits, otherwise skew the libors a bit." Hayes went on to request, "really need high 6m [6-month] fixes till Thursday." Ruh responded, "yep we on the case there . . . will def[initely] be on the high side." The day before this request, UBS' six-month Yen-LIBOR submission had been tied with the lowest submissions included in the calculation of the LIBOR fix. Immediately after this request for high submissions, however, UBS' six-month Yen-LIBOR submissions rose to the

highest submission of any bank in the Contributor Panel and remained tied for the highest until Thursday as Hayes had requested.

- 293. In early 2007, Roger Darin, who was also a UBS manager and Yen derivatives trader, trained a new UBS Yen-LIBOR "Submitter-2," Rolf Keiser. During that training, Keiser was instructed that the primary factor in determining UBS' Yen-LIBOR submissions each day was the UBS Yen derivatives traders' requests, which were to be accommodated. Keiser followed that directive, and accommodated Hayes and other UBS Yen derivatives traders' requests for LIBOR submissions through July 2009, when his responsibilities at UBS changed.
- 294. From at least August 2007 and at various times through at least September 2009, the manager of one of the Yen derivatives trading desks in Tokyo exerted pressure on Yen-LIBOR submitters to take derivatives traders' positions into account when setting Yen-LIBOR. Yen derivatives traders routinely requested that the submitters contribute Yen-LIBOR submissions to benefit their trading books, and the submitters, in accordance with the instructions from their superiors at UBS, accommodated derivatives traders' requests.
- 295. An example of such an accommodation occurred on March 29, 2007, when Hayes asked UBS submitter Roger Darin, "can we go low 3[month] and 6[month] pls? . . . 3[month] esp." Darin responded "ok", and then the two had the following exchange by electronic chat:

March 29, 2007:

<u>UBS [Hayes]</u>: what are we going to set?

<u>UBS [Darin]</u>: too early to say yet . . . prob[ably] .69 would be our unbiased contribution

<u>UBS [Hayes]</u>: ok wd really help if we cld keep 3m low pls

<u>UBS [Darin]</u>: as i said before - i [don't] mind helping on your fixings, but i'm not setting libor 7bp away from the truth. . . i'll get ubs banned if i do that, no interest in that.

<u>UBS [Hayes]</u>: ok obviousl; y [sic] no int[erest] in that happening either . . . not

asking for it to be 7bp from reality anyway any help appreciated[.]

Hayes received the help he requested. Although UBS' "unbiased contribution" 296.

for three-month Yen-LIBOR would have been .69 that day, Darin lowered his submission to .67.

297. As another example, a series of electronic chats between March 12 and 17, 2008,

demonstrate that Hayes caused UBS' Yen-LIBOR submission to move three basis points over a

five-day period. On Wednesday, March 12, 2008, Hayes asked "Submitter-2," Rolf Keiser, to

raise the three-month Yen-LIBOR submission from the previous day's .99 contribution, because

"we have [\$2 million] usd fix in 3[month Yen-LIBOR] on Monday [March 17] per bp." Keiser

responded: "with yesterdays 99 i was already on the very high side. i need to go down a touch

lower on the back to what happened yesterday. . . thought about .97." Hayes responded: "cool

no chance of .98? anyway the actual fix is Monady [sic] [March 17] so that's the key day."

Although Keiser had intended to drop his Yen-LIBOR contribution down to .97 on March 12, he

instead raised UBS' Yen-LIBOR submissions to .98. The following day, Keiser raised it again

to .99, and on Monday, March 17, 2008 the following exchange occurred:

March 17, 2008:

UBS [Hayes]: been chatting with [your supervisor, Roger Darin] . . . can we go . . . high 3[month Yen-LIBOR] . . . obviously with the size of the fix today and

confusion over levels if we could push it a bit more than usual it would be great

UBS [Keiser]: Friday fixed 3mt at 0.99

<u>UBS [Hayes]</u>: thx [Keiser]

UBS [Keiser]: shall I go fro 1%?

UBS [Hayes]: pls

<u>UBS [Keiser]</u>: ok will do

103

298. As promised, Keiser made UBS contribute a Yen-LIBOR submission of 1% that

day, three basis points higher than where he had intended to submit a few days earlier.

In a March 28, 2008, electronic chat between Hayes and Keiser, Hayes was again

successful in manipulating UBS' Yen-LIBOR submission to benefit his trading positions:

March 28, 2008:

<u>UBS [Hayes]</u>: just for my guide [Keiser] roughly wher are we going to set 3m

and 6m?

<u>UBS [Keiser]</u>: 3m0.92 6m 0.96

UBS [Hayes]: can we go lower?

UBS [Keiser]: sure . . . dont think it will be that low though . . . but can do 090

UBS [Hayes]: so can we set 6m at .94 too? . . . 6m is much more urgent . . . most

urgent of the lot

UBS [Keiser]: i just put in 0.95 for 6mt

UBS [Hayes]: ok . . . Thx

300. On March 28, 2008, Keiser lowered UBS' three-month Yen-LIBOR submission

from .92 to .90, and lowered UBS' six-month submission from .96 to .95, as discussed above.

301. On some occasions, UBS Yen-LIBOR submitters would also amend, if possible,

previously submitted Yen-LIBOR contributions to accommodate UBS' trading positions. For

example, in an April 4, 2008 electronic chat between Hayes and Keiser, the following exchange

occurred:

April 4, 2008:

<u>UBS [Hayes]</u>: have you put the [Yen] libors in?

104

<u>UBS [Keiser]</u>: y[es] . . . any changes?

<u>UBS [Hayes]</u>: oh was going to ask high 6m if not too late

<u>UBS [Keiser]</u>: i input 95 . . . which is on the lower side

<u>UBS [Hayes]</u>: ok is it too late to change? . . . if not no drama

<u>UBS [Keiser]</u>: i try to change it now but cannot gaurantee if it gets accepted

<u>UBS [Keiser]</u>: just cannged [sic] it to 0.98

- 302. UBS' six-month Yen-LIBOR submission that day was indeed .98, three basis points higher than Keiser's originally intended submission.
- 303. As another example, on June 29, 2009, Hayes contacted Keiser by electronic chat, explaining that he had huge positions that day and asking, "can we [submit] 6 mlibor high pls." Keiser stated "...we dont have any fix at mom." Hayes responded by asking, "can we go 74 or 75 [meaning .74 or .75] . . . we have [\$2 million per basis point exposure] for the next week." Keiser agreed to accommodate this request, responding, "yes sure will. I go with .75 for you[.]" Thus, Keiser agreed to move UBS' six-month Yen-LIBOR submission by 3.5 basis points that day to benefit Hayes' position.
- 304. From in or around 2007 through 2009, on some occasions, UBS Yen derivatives traders also requested that UBS Euroyen TIBOR submitters contribute Euroyen TIBOR submissions to benefit their Euroyen-based derivatives positions. The TIBOR submitters' manager, Roger Darin, routinely provided suggested TIBOR submissions based on the derivatives traders' positions, and the TIBOR submitters relied upon this input when making UBS' Euroyen TIBOR submissions.

305. For example, in a November 8, 2007 electronic chat, Roger Darin, who was also a

UBS Yen derivatives trader, instructed the TIBOR submitter: "pls remind me tomorrow . . . we

need to move the 1mos tibor up . . . maybe +2 tomorrow . . . then 1 bp on each for a few days . . .

swap guys having some fixings." The TIBOR submitter responded "ok, noted".

As another example, on July 23, 2009, Darin caused UBS' Euroyen TIBOR 306.

submissions to decrease for a different improper purpose. On that day, Darin had the Euroyen

TIBOR submitter drop UBS' three-month TIBOR submission by four basis points simply to

damage Hayes' positions, and not because that was where he perceived Yen cash was trading. In

an electronic chat with Guillaume Adolph at Deutsche Bank, Hayes explained how he would

rectify the situation by manipulating TIBOR settings higher the following week: "[Darin, who

caused TIBOR to drop] hates me and is going to zurich . . . [his] last day is Friday . . . so [he]

tried to screw my pos[ition] ... next week we have control ... so will try to get it back up ... or

rather will do it . . . monday goes back up...."¹³³

307. Later that same day, in a separate electronic chat with Broker Defendant ICAP's

Darrell Read, Hayes described how he successfully reached out to the UBS TIBOR submitters to

raise UBS' three-month submission back up:

UBS [Hayes]: main thing is 3m tibor . . . i went to meet the guys who set it today

ICAP [Read]: you can asist there

<u>UBS [Hayes]</u>: they just set where we ask

ICAP [Read]: ;-) perfect

106

¹³³ Ex. A-1 at 15.

- i. <u>UBS Continued Its Manipulation of Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives after Hayes Left</u>
 UBS for Defendant Citibank Japan.
- 308. Traders on the UBS Yen desk continued to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives to benefit UBS' derivatives trading positions after Hayes left UBS in September 2009. These traders utilized some of the same methods, internal requests, use of inter-dealer brokers, and coordination with other banks. The UBS Euroyen-based derivatives traders, on their own and at their manager Mike Pieri's direction, also continued to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives through UBS' submissions in order to manage Hayes' positions or to benefit UBS' other Euroyen-based derivatives trading positions.
- 309. At least one broker reached out shortly after Hayes' departure to assure one of UBS' Euroyen-based derivatives traders that he would continue to help UBS influence the rates submitted by other banks. For example, on September 10, 2009, "UBS Yen Trader 2," Mirhat Alykulov, reminded Darrell Read at Broker Defendant ICAP that "Monday is the d-day" due to big fixes on swap transactions tied to three and six month Yen-LIBOR, both of which he needed low. Read assured Mirhat Alykulov he would help him to influence the three-month fix:

... you realise that you have the ability to influence the 3m fix, you are currently sitting at the upper end of the range. The 6m will have to come down to others as you are already v low .. .ill remind you to chase your cash boys as well:-)

310.				
		:		



b. RBS.¹³⁵

- 311. From mid-2006 through late 2010, multiple RBS Yen traders and at least one manager attempted to manipulate Yen-LIBOR by making hundreds of manipulative requests of RBS' Primary Submitter, Paul White, and London-based traders, including RBS Yen Traders 1 and 2, Neil Danziger and Will Hall. At times, they were successful in manipulating Yen-LIBOR. RBS' Senior Yen Trader, Jimmy Tan, made most of the requests, but RBS' Yen Manager, Jezri Mohideen, and other RBS Yen traders also made such requests. London-based Euroyen-based derivatives traders also made their own requests of RBS' Primary Submitter, Paul White, both in person as they sat together, and through Bloomberg chats and other means. RBS' derivatives traders' requests for artificial Yen-LIBOR submissions were common and made openly on the trading floors in Asia and London. At times, at least one RBS manager was present when requests were made.
- 312. The requests were often accommodated by RBS' Primary Submitter, Paul White, and by RBS' backup submitters, including most often RBS Yen Trader 1, Neil Danziger. Euroyen-based derivatives traders' requests for beneficial submissions were usually for the most frequently traded tenors: one-month, three-month, and six-month. At times, the requests covered other tenors as well. Always seeking to maximize profit, the traders either asked for specific

¹³⁴

¹³⁵ *See also* Ex. B-4 at 8-18.

rates to be submitted or asked for a directional move, either higher or lower, in RBS' submissions. The requests were either for a particular day or for several days, and on some occasions, even weeks of submissions.

- 313. Starting as early as August 2006, a Euroyen-based derivatives trader employed by RBS Japan sent requests for favorable Yen-LIBOR submissions to a Yen derivatives trader in London, who in turn sometimes indicated he would seek accommodations from Paul White.
- 314. Starting in early 2007, RBS Euroyen-based traders made more frequent requests for specific Yen-LIBOR submission in order to benefit their trading positions. This increase in 2007 began shortly after Jimmy Tan in Tokyo (who was employed by RBS Japan until December 2009) began working with Neil Danziger in London on the Yen derivatives book, and Will Hall joined the Yen derivatives swaps desk in London.
- 315. Tan and Danziger often discussed their need for Yen-LIBOR in a specific tenor to move in a particular direction on a specific day or over a period of days to benefit a Yen derivatives trading position, and Danziger generally passed on the request to Paul White.
- 316. Tan sometimes passed his requests through other money market traders. For example, in an electronic chat on May 3, 2007, Tan asked a junior derivatives trader who acted as a backup Yen-LIBOR submitter, "can you do me a favour? ..can you drop a note to [Paul White] (JPY money mkt dealer) to set low lm and low 3m Yen-LIBOR today please? Thanks." The junior backup submitter responded, "just gave him a shout, said already on it..."
- 317. Danziger also served as a backup Yen-LIBOR submitter during times when White was away from the desk, and made Yen-LIBOR submissions to benefit derivatives trading books. Thus, for example, on August 20, 2007, Tan noted in an electronic chat that "[Danziger] is the one setting jpy [Yen] libor in london now ...for this week and next." The reason was that

"[White] is on leave." That same day day, another Tokyo-based derivatives trader, Trader-4, 136 asked "where's young [Danziger] thinking of setting it?" Tan responded, "where would you like it[,] libor that is[,] same as yesterday is call." Trader-4 said, "haha, glad you clarified! mixed feeling but mostly I'd like it all lower so the world starts to make a little more sense." Tan then weighed in, observing that "the whole HF world will be kissing you instead of calling me if libor move lower." Danziger responded, "ok, i will move the curve down ...1 bp...maybe more...if i can." Tan suggested that the time to move was not now: "maybe after tomorrow fixing hehehe." Danziger responded, "fine...will go with same as yesterday then."

- 318. At times, derivatives traders who had different trading books and conflicting interests in the direction of Yen-LIBOR competed for submissions. On March 27, 2008, for example, Tan and Danziger expressed frustration that Will Hall, another Yen derivatives trader based in London, attempted to influence RBS' LIBOR submission. Tan asked Danziger, "we change the libor lower?," to which Danziger responded, "i was in a novation meeting and [Hall] asked [a junior Yen derivatives trader serving as a backup Yen-LIBOR submitter] to put it low." Tan opined that "[Hall] shud have just [squared] it with us if he need it lower...cos i dont think they have as big position as us next few weeks...i dont think [Hall] or the long end guys shud ever touch the libor...they shd check with us." Danziger responded, "i know," and Tan complained that "thats probably gonna cost us 200k gbp."
- 319. Later in the same March 27, 2008 electronic chat, Tan and Danziger discussed their need to increase Yen-LIBOR the next day to benefit their trading position:

March 27, 2008:

RBS [Tan]: tomorrow we need to bump it [six-month LIBOR] way up high...highest among all if possible

¹³⁶ Trader-4 was employed by RBS Japan.

<u>RBS [Tan]</u>: we need to bump up all the way in the 3mth libor tomorrow as well

<u>RBS [Danziger]</u>: we will put it in tonmorrow morning and no one will touch it i promise you.

- 320. The next day, RBS increased its three-month Yen-LIBOR submission by three basis points, making it the second-highest submission, and increased its six-month submission by five basis points, making it the third-highest submission.
- 321. On at least one occasion, an RBS Yen derivatives trader recognized that it might be necessary to have an excuse for manipulating RBS' Yen-LIBOR contributions that day. On August 28, 2008, Danziger asked Tan, "where shall we put libors." Tan responded, "high 3m ... low 6m." They then discussed the one-month LIBOR submission. Danziger said, "1s?", to which Tan responded: "low . . . so we dont need to change 1 today . . . pretend we forgot . . . we can change it tomorrow . . . assuming no one else in bank has any position in 1s." RBS kept its one-month Yen-LIBOR submission unchanged that day, tying it for the third lowest of all Contributor Panel Banks. Consistent with Tan's request, RBS' three-month Yen-LIBOR submission increased by two basis points and its six-month Yen-LIBOR submission declined by one basis point.
- 322. Tan and Danziger on occasion passed their requests to Paul White for Yen-LIBOR submissions through a junior derivatives trader, Trader-5, who worked on the Yen desk in London under Danziger. For example, on April 24, 2009, Trader-5 asked White, "Can we go with high 3s and high 6s plz today." White responded, "they are lookingh bit softer, but will try and keep ours unch." Trader-5 responded, "thnx." RBS' three-month and six-month Yen-

¹³⁷ In the context of the RBS chats, "unch" appears to mean that the LIBOR would be unchanged from the previous day.

LIBOR submissions on that day were unchanged from the day before, and both were above the

actual Yen-LIBOR fix.

323. On another occasion, in an electronic chat on September 23, 2009, Tan said to

Trader-5, "hey... can you ask [Paul White] if he can lower his 3mth Libor by 1 bp today? and

everything else unchange." Trader-5 responded, "yes," then "asking," and finally, "agreed." On

that day, RBS lowered its three-month Yen-LIBOR submission one basis point compared to the

previous day.

324. On another occasion, on April 22, 2009, Danziger asked White in an electronic

chat, "can we push up 6m again pls?" White responded, "ok will try." Danziger then asked,

"what do you think we can go for?," to which White responded, "77." That day, RBS' six-

month Yen-LIBOR submission increased by one basis point to 0.77, making RBS the highest

submitter among the eight banks included in that day's Yen-LIBOR fixing. RBS also had

increased this submission one basis point on the previous day.

Requests for favorable Yen-LIBOR submissions were often treated in a routine, 325.

even casual, manner. One example is a May 20, 2009 exchange in an electronic chat involving

Danziger and White, among others:

May 20, 2009:

RBS [Danziger]: high 3s and low 6s pls [Paul White]

RBS [White]: no problems

RBS [Danziger]: grazias amigo . . . where will you lower 6s to?

RBS [White]: 70

112

- 326. RBS' six-month Yen-LIBOR submission on May 20th dropped two basis points from 0.72 (where it had been the preceding two days) to 0.70, and on the following two days it reverted to 0.72.
- 327. A second example is an electronic chat dated September 15, 2009, in which Danziger asked, "can we lower our fixings today please [White]." White responded, "make your mind up," then "haha, yes no probs." Danziger stated, "im like a whores drawers." RBS lowered its three-month and six-month Yen-LIBOR submissions on that day, and kept its one-month submission the same.
- 328. Jimmy Tan's and Danziger's requests for false Yen-LIBOR submissions continued throughout 2010. For example, on July 20, 2010, Tan, in an electronic chat with Danziger, asked, "can you ask [Paul White] to set 6m JPY higher today? 45 would be good..." Danziger responded, "yes i did" and "he will bump it up a point." On that day, RBS' six-month Yen-LIBOR submission increased from 0.44 to 0.45.
- 329. By at least September 2010, certain RBS Yen derivatives traders became aware of a prohibition on communicating about requests for LIBOR submissions. On September 24, 2010, in an electronic chat involving Tan, Danziger, and Trader-5, among others, Tan initiated a request by stating, "hey [Danziger], can you ask [White] to push 6m Yen-LIBOR up 2 bps to 44." Danziger responded, "ha . . . i will mention it ... no emails anymore . . . after tom," referring to former UBS trader Tom Hayes. Tan replied, "haha...i heard he called up BBA to ask them to change the way they fix the libor."
- 330. A month later, on October 28, 2010, Tan, in an electronic chat with Danziger, indicated that he would make his request orally rather than in an electronic communication "after the tomhayes thing":

October 28, 2010:

RBS [Tan]: it would help if [Paul White] hike up 1 bp today

<u>RBS [Danziger]</u>: i try, after the tomhayes thing its more difficult . . . i feel the more i ask the more he wont . . . out of principal

RBS [Tan]: true

RBS [Danziger]: cos i cant type it on chat anymore . . . i have to walk over

331. In a November 22, 2010, electronic chat, Tan and Danziger discussed their view that they should take over submitting Yen-LIBOR on RBS' behalf:

November 22, 2010:

RBS [Tan]: actually we shd just take over the libor setting

RBS [Danziger]: hahaha

RBS [Tan]: doesnt make sense for him [Paul White] cuz he doesnt have any risk

RBS [Danziger]: i agree

<u>RBS [Tan]</u>: [A manager in Singapore] question today why [Paul White] sets it when he doesnt even have any risk

RBS [Danziger]: but libor i guess technically isnt meant to be set by risk takers

RBS [Tan]: yes but why give it away the advantage?

332. Earlier in that same electronic chat, Tan and Danziger indicated they were aware that LIBOR was coming under scrutiny, yet they continued to discuss how to manipulated Yen-LIBOR for their benefit:

November 22, 2010:

<u>RBS [Tan]</u>: hey ... you think we be able to convince [Paul White] to change the libor today?

RBS [Danziger]: i can try

RBS [Tan]: need to drop 3mth Libor and hike 6m Libor

RBS [Tan]: he dropped 6m by 2 bps last friday

RBS [Danziger]: at the moment the FED are all over us about libors

RBS [Tan]: thats for the USD?

RBS [Danziger]: yers

RBS [Tan]: dun think anyone cares the Yen-LIBOR

RBS [Danziger]: not yet

333. In 2010, after RBS began an investigation into U.S. Dollar LIBOR reporting practices in response to inquiries from governmental authorities, the head of money market trading in London instructed other money market traders that they were not to accept requests for LIBOR submissions from derivatives traders. Nonetheless, on November 24, 2010, after Tan sent an electronic message to Paul White asking to increase RBS' six-month Yen-LIBOR submission to suit a trading position, White called Tan and stated that "we are not allowed to have those conversations on Mindalign [RBS' Internal Electronic Chat System]." Tan referenced "the BBA thing," after which White stated, "leave it with me and, uh, it won't be a problem. . ." Tan responded, "ok, great."

c. Rabobank. 138

334. For nearly six years, from at least mid-2005 through at least early 2011, Rabobank, through its Euroyen-based derivatives traders and Yen-LIBOR submitters, frequently attempted to manipulate Yen-LIBOR and the prices of Euroyen-based derivatives and consistently made false Yen-LIBOR submissions in furtherance of those attempts. At times, Rabobank successfully manipulated Yen-LIBOR. Several Rabobank traders transmitted hundreds of internal requests to its Yen-LIBOR submitters for false LIBOR submissions to

¹³⁸ See also Ex. D-2 at 12-20, 24-33.

benefit the traders' (and Rabobank's) LIBOR-based trading positions. The submitters accommodated those requests on a regular basis and certain submitters also took into account their own trading positions when making LIBOR submissions.

- Thompson, emailed Rabobank's Yen-LIBOR submitter, Paul Robson, with the subject line: "3mths." In the email, Paul Thompson wrote: "If in 2 minds on 3mth yen libor today, prefer u to go higher rather than lower mate if you've got ntg in it." Paul Robson replied: "no prob mate...what u want me to set mate 43?....44?" Thompson wrote back: "0.44 if you can keep a straight face.." Robson responded: "no prob mate 44 it is!" That day, as requested, Rabobank's three-month Yen-LIBOR submission was 0.44, an increase of one basis point. Rabobank's submission went from being tied as the fifth-highest submission on the Contributor Panel on the previous day to being tied as the second-highest submission on the Contributor Panel.
- 336. Two weeks later, on Wednesday, October 25, 2006, Paul Thompson emailed the backup Yen-LIBOR submitter "Submitter-5," Paul Butler, with the subject line: "libors." In the email, Paul Thompson wrote: "I have a few chunky rolls in the 3 mth yen libors in the next few days. I don't want to compromise your integrity.. but if you've got ntg in it maybe a smidge lower today (actually shud be anyway as futures are a abt 1 higher anyway) and then high for Thurs and Fri would be great then I will be back in my box for another 2 weeks." Paul Butler responded: "sure no problem mate if you have a sec can i have the lvls plse." That day, Rabobank's three-month Yen-LIBOR submission was consistent with Thompson's request, decreasing one basis point from 0.45 to 0.44. Rabobank's submission went from being tied as the fourth-highest submission on the Contributor Panel on the previous day to being tied as the

2006, Rabobank's contribution was again consistent with Paul Thompson's request, increasing one basis point, from 0.44 to 0.45, whereas the rest of the Contributor Panel either remained unchanged or decreased their submissions. Rabobank's submission went from being tied as the twelfth highest submission on the Contributor Panel to being tied as the second highest submission on the Contributor Panel. The next day, Friday, October 27, 2006, Rabobank's contribution was again consistent with Thompson's request, remaining at 0.45, whereas the rest of the Contributor Panel decreased its submissions by an average of approximately half a basis point. Rabobank's submission remained tied as the second highest submission on the Contributor Panel.

LIBOR submitter Paul Robson: "Got a few big 3mth fixings in next 2 days, any chance you cud bump it up a couple? What do u actually think 3mth today 45.25-45.5 ish?" Paul Robson wrote back: "will set them high and dry skip!" The next day, Paul Thompson wrote back: "Thx skip, 1 more today - only has to be 3 mths, others do as you pls, then im relatively square for a while.." Paul Robson replied: "no prob mate will set it high again...is 46 lvl ok or higher?" On both days, Rabobank's three-month Yen-LIBOR submissions were consistent with Paul Thompson's request. On November 8, 2006, Rabobank's submission was 0.46, an increase of three basis points from the previous day's submission, whereas the rest of the Contributor Panel stayed approximately the same on average. Rabobank's submission went from being tied as the second-lowest submission on the Contributor Panel on the previous day to being tied as the third highest submission on the Contributor Panel. On November 9, 2006, Rabobank's submission was again 0.46, keeping Rabobank's submission tied as the third-highest submission on the Contributor Panel.

- 338. Multiple Yen-LIBOR submitters on the desk regularly accommodated requests, and when one submitter on the desk was out, swaps traders knew to make their requests to substitute submitters to ensure that their requests would be accommodated. For example, on February 9, 2007, Paul Thompson emailed Paul Robson with the subject line: "3 mth libors." In the message, Paul Thompson wrote: "Mate, be great if you could keep your 3 mth libor unchanged today if you can get away with it and its ok with your posy." Paul Robson replied: "you need a high one? no prob skip." Paul Thompson wrote back: "Yes pls mate, my only major fixing for a while, cheers." Robson replied: "off next week mate so if u need any libor requests next week -give [Paul Butler] a shout." That day, as requested, Rabobank's three-month Yen-LIBOR submission was 0.55, the same as the previous day, tied as the highest submission on the Contributor Panel. The next week, on February 14, 2007, Paul Thompson wrote to Paul Butler with the subject line "6m yen libor," and asked: "Can you keep your 6m yen libor at 0.62 today if poss as have a large fixing today?" Paul Butler wrote back: "sure will do mate." That day, as requested, Rabobank's six-month Yen-LIBOR submission remained at 0.62. Rabobank's submission went from being tied as the third-highest submission on the Contributor Panel on the previous day to being the highest submission on the Contributor Panel.
- 339. In addition to accommodating swaps traders' requests, Rabobank Yen-LIBOR submitters also took their own Euroyen-based derivatives trading positions into account. When multiple Rabobank swaps traders had trading positions that conflicted with each other, submitters had to balance competing requests. For example, on Monday, March 26, 2007, Paul Thompson emailed Paul Robson: "On libors, this week have a fair bit of 6mths rolling off, I am short so if you can discreetly drop your 6m by 1-2 bp without any trouble would be great if not no probs mate" and "Im happy for you to keep your 1 mth high as both [another Yen swaps

trader ("Trader-5," Takayuki Yagami)] and I are long a fair bit of those till Wed." Paul Robson wrote back: "sure no prob - all my stuff is mainly 1 mth so will keep that high and drop 6's cheers." On Tuesday, March 27, 2007, as requested, Rabobank's six-month Yen-LIBOR submission decreased two basis points, from 0.74 to 0.72. Rabobank's submission went from being tied as the second-highest submission on the Contributor Panel on the previous day to being tied as the eighth-highest submission on the Contributor Panel. Likewise, Rabobank's one-month Yen-LIBOR submission decreased three basis points, whereas the other panel banks' submissions decreased by approximately four and three-quarters basis points on average. As a result, Rabobank's submission went from being tied as the second-highest submission on the Contributor Panel on the previous day to being tied as the highest submission on the Contributor Panel.

340. Rabobank's Yen-LIBOR submitters accommodated swaps traders' requests to the point of allowing the swaps traders to significantly influence the setting process, particularly Takayuki Yagami, who made regular requests to Rabobank's London-based Yen setters. For example, on August 21, 2007, Takayuki Yagami emailed Paul Butler with the subject line "LIBORS" and asked: "If you can make 1 month LIBOR higher today, that would be a help mate." Paul Butler replied: "Ok what level you looking at?" Takayuki Yagami wrote back: "If possible, woud prefer it to be 0.82%." Paul Butler wrote back: "Ok mate will do." Takayuki Yagami then wrote: "Thank you for help mate. What do you guess tdy's 3m ad 6m yen libors? Higher or lower?" Paul Butler responded: "Hahah you tell me I m not really watching the yen libors all my stuff going a bit mad at mom." Yagami later asked: "Where are you setting 3mth and 6mth libor today?" Butler repeated: "You tell me what you want mate he has no fixing at mom." Yagami responded: "1m 0.82 . . . 3m 1.00 6m 1.06 If you can put those rates...would be

whatever you want mate ok cheers." That day, as requested, Rabobank's one-month Yen-LIBOR submission was 0.82, an increase of four basis points. Rabobank's submission went from being tied as the eleventh-highest submission on the Contributor Panel on the previous day to being tied as the second-highest submission on the Contributor Panel. Likewise, as requested, Rabobank's three-month Yen-LIBOR submission was 1.00, and its six-month Yen-LIBOR submission was 1.06.

- 341. As another example, on August 24, 2007, Takayuki Yagami emailed Paul Butler with the subject line "libors" and stated: "I would like today's 6m libor lower today mate," to which Paul Butler replied: "Ok mate what level do you want mate." Later that day, Takayuki Yagami emailed Paul Butler again and asked: "What rate did you input for libors?" Paul Butler responded: "Himmate I have not done them what do u want." Takayuki Yagami wrote back: "1m 0.78," "3m 0.99," "6m 1.00." Later that day, after the Yen-LIBOR submissions and fixing had been published, Takayuki Yagami replied again: "Ops... Sorry that I meant 6m is 1.10.... Not 1.00%. Just bit surprised when I saw our 6m libor price." That day, as requested, Rabobank's one-month Yen-LIBOR submission was 0.78, and its three-month Yen-LIBOR submission was 0.99. Rabobank's six-month Yen-LIBOR submission was 1.00, consistent with Takayuki Yagami's mistaken request, a fifteen basis point decrease from the previous day's submission, whereas the other panel banks' submissions decreased by approximately half a basis point on average.
- 342. Rabobank's Yen-LIBOR submitters knew their Yen-LIBOR submissions were false. For example, on September 21, 2007, Takayuki Yagami emailed Paul Robson with the subject line "libors," writing: "Wehre do you think today's libors are? If you can, I would like

Imth libors higher today." Paul Robson replied: "Bookies reckon lm sets at .85." Takayuki Yagami wrote back: "I have some fixings in 1 mth so would appreciate if you can put it higher mate." Paul Robson replied: "No prob mate let me know your level." Takayuki Yagami responded: "Wud be nice if you could put 0.90% for lmth cheers." Paul Robson wrote back: "Sure no prob. I'll probably get a few phone calls but no worries mate!" Takayuki Yagami replied: "If you may get a few phone calls then put 0.88% then." Paul Robson responded: "Don't worry mate – there's bigger crooks in the market than us guys!" That day, as requested, Rabobank's one-month Yen-LIBOR submission was 0.90, an increase of seven basis points from its previous submission. Rabobank's submission went from being tied as the tenth-highest submission on the Contributor Panel on the previous day to being the highest submission on the Contributor Panel.

- 343. Similarly, on October 17, 2008, Takayuki Yagami emailed Paul Robson, and asked: "If possible, could you keep setting 6m libor at 0.80% for a while please?" Paul Robson wrote back: "Hi mate oh yes we are now setting all libors significantly under the market levels."
- 344. On March 19, 2008, Takayuki Yagami emailed Paul Robson with the subject line "LIBORs," and wrote: "We have loads of 6mth fixings today. If possible, could you set 6m libor to 1.10% please? We don't have particular interest in other libors." Paul Robson wrote back: "Sry just to confirm 6m you want at 1.10??? Ok will do that but I will prob get a phone call at I set 02 yesterday and brokers reckon everything a little lower today," continuing: "But will set your level cheers." Takayuki Yagami wrote back: "Actually...[another Yen Trader and Takayuki Yagami's supervisor ("Trader-6," Tetsuya Motomura)] would like 6m to be higher today.... If it is not appropriate, it is fine mate, I will explain the situation to him. He will understand the

situation. He is on holiday today. He just called me up in this morning to ask you to put libors higher." Paul Robson replied: "Well its no prob mate -1 can set it that high, it will be quite funny to see the reaction!" Takayuki Yagami wrote back: "I felt that it was a little funny so...if you can put a little higher 6mth up to the lvl you feel comfortable, lbp or a couple of bp would be fine for him mate." Paul Robson wrote back: "No worres mate - I'll set it at 1.10[.]" That day, as requested, Rabobank's six-month Yen-LIBOR submission was 1.10, an increase of eight basis points from its previous submission of 1.02, , whereas the other panel banks' submissions decreased by approximately a third of a basis point on average.

- 345. Robson then contacted Andy Doe from Lloyds to request a similar manipulation of Lloyds' Yen-LIBOR submission for that day: "[Yagami] needs a high 6m libor if u can help skip asked me to set 1.10!" Doe answered: "oops my 6s is 1.15!!!," "he'll love me," and "send him my regards the lovely fella....not heard from him in a while....." Doe followed through on his promise, submitting six-month Yen-LIBOR at 1.15 on March 19, 2008. Rabobank's submission went from being tied as the tenth highest submission on the Contributor Panel on the previous day to being the second highest submission on the Contributor Panel.
- 346. Anthony Allen, who supervised the Yen-LIBOR submitters in addition to the U.S. Dollar LIBOR submitters, was aware of the conduct on the desk he supervised and played an active role in it. As an example, on March 14, 2007, Paul Thompson messaged Anthony Allen and asked: "Is [Paul Butler] in mate?" Anthony Allen replied: "Not yet," and asked: "can I help?" Paul Thompson wrote back: "No worries mate, I think [Paul Robson] just wanted him to nudge up a few of the LIBORs.. Will send him a mail." Allen replied: "Ok cc [additional individual] and ["Submitter-1" Anthony Conti] on it aswell mate, just in case." Thompson replied: "I got hold opf [Paul Butler] mate and he said all in hand, cheers."

- 347. In January 2009, new submitters took responsibility for setting LIBOR with limited knowledge of the process and without training. As a result, Rabobank Yen trader Takayuki Yagami began to exercise even more control over the LIBOR setting process. As an example, on January 28, 2009, Takayuki Yagami emailed the new Yen-LIBOR submitter ("Submitter-6" Jeroen Beaard): "Could you set todays libors,,,3mth at 0.65% 6mth at 0.83% pls?" Later, Yagami emailed Jeroen Beaard again: "If you haven't set 6m libor yet,,, could you set it at 0.82% instead of 0.83% pls? 3mth is ok with 0.65%." That day, as requested, Rabobank's three-month Yen-LIBOR was 0.65. Likewise, as requested, Rabobank's six-month Yen-LIBOR submission was 0.82, a decrease of eight basis points from its previous submission, whereas the other panel banks' submissions stayed approximately constant on average. Rabobank's submission went from being tied as the fourth highest submission on the Contributor Panel on the previous day to being tied as the eleventh highest submission on the Contributor Panel.
- 348. After January 2009, Takayuki Yagami frequently sent an entire slate of LIBOR rates to the submitters for them to input. For instance, on February 25, 2009, Takayuki Yagami wrote to Jeroen Beaard with the subject line "libors" and wrote: "Could you set libors for today as below please?": "1m 0.39;" "2m 0.60;" "3m 0.65;" "4m 0.71;" "5m 0.76;" "6m 0.80." The next day, he wrote again to Jeroen Beaard with the subject line "libors" and wrote: "Could you put the below libors for today pls?": "1m 0.55%;" "2m 0.60%;" "3m 0.65%;" "4m 0.71%;" "5m 0.76%;" "6m 0.80%." On both days, Rabobank's Yen-LIBOR submissions were made as requested.
- 349. Submitters would often seek out Takayuki Yagami's input in the setting process. For instance on January 30, 2009, Jeroen Beaard messaged Takayuki Yagami: "any preferences

in fixings today?" Takayuki Yagami wrote back: "6m 0.82% pls," to which Jeroen Beaard responded: "will do." That day, as requested, Rabobank's six-month Yen-LIBOR submission was 0.82, a decrease of three basis points from its previous submission, whereas the other panel banks' submissions decreased by approximately a basis point on average. Rabobank's submission went from being tied as the eighth-highest submission on the Contributor Panel on the previous day to being the eleventh-highest submission on the Contributor Panel.

- 350. Takayuki Yagami monitored Rabobank's Yen-LIBOR submissions and would follow up with the submitters on the occasions when their submissions strayed from his requests. 'For example, on January 30, 2009, Takayuki Yagami emailed Jeroen Beaard and wrote: "Why did you moved up 3m libor by 10.5bp? It is ridiculous." Jeroen Beaard wrote back: "had again problems with publishing from my sheet," "Wrong figure came across by putting in manual adjustments," "Gonna automatize it today." Takayuki Yagami wrote back: "3m libor could have been below 0.67 if we, Rabo, didn't moved up by 10.5bp!" Jeroen Beaard responded: "They didn't call from reuters why we were 10.5 tics out which they should have done," continuing: "And they take the outliers out of their calculations, so the 76.5 price shouldn't be included." Takayuki Yagami explained: "If we have stayed at 0.66% instead of 0.765, then the 3mth libor should have been 0.668125% instead of 0.67063%. so it is below 0.67%."
- 351. On October 18, 2010, Takayuki Yagami emailed Jeroen Beaard's replacement as the Yen-LIBOR submitter ("Submitter-8") and wrote: "Why did you put all the Yen-LIBORs higher for today without telling me? Where is the team play? You know my position is? I cant believe you did this without telling me. If you had to put them higher for some reason but at least you could have told me in before hand. Im really fukked." At around the same time, Takayuki Yagami messaged Submitter-8: "why did you put libors all higher?" Submitter-8 wrote

back: "Hi made I just saw your email and replied.. I fukked up., you gave [the new back-up Yen-LIBOR submitter ("Submitter-7")] new libors last week., didn't save the sheet and today I used my own computer for libors.. I fukked up, my mistake., not on perpose mate," "I am really sorry," "And I would never change libors without consulting you." Takayuki Yagami messaged back: "i got so surprised when i saw rabos number, you know my position then put libors higher," explaining: "some ppl react in this way so i worried as well if you were this kind of a guy."

- Rabobank's Yen-LIBOR submission was to affect the final Yen-LIBOR fix. For example, on January 29, 2009, Jeroen Beaard messaged Takayuki Yagami and wrote: "saw the 6m vs 3m basis collapsing last night.." Takayuki Yagami wrote back: "because we lowered 6m libor!" Jeroen Beaard responded: "heheh absolutely., it comes ur way i presume," and later: "preferences in the fixing today?" On October 20, 2010, Submitter-8 chatted with Takayuki Yagami, writing: "so whats the reason that you dont put down Rabo Yen libor numbers? just one tick to see what happens? Or is that sort of manipulation and not done? or am I saying something stupid now?" Takayuki Yagami responded: "Rabo Yen-LIBOR numbers are already one of the lowest four banks among 16 panel banks so even if we put them lower further, it wouldnt give any change on yen libors," to which Submitter-8 replied: "I see.." Takayuki Yagami then wrote: "and i think just keep libors one of the lowest four banks is the good, idea because it isnt obvious so that ppl wouldnt notice, if it is too obvious, ppl could start looking at us manipulating libors." (Emphasis added).
- 353. Takayuki Yagami had almost complete control over the Yen-LIBOR setting process at Rabobank after Rabobank's LIBOR submitters moved to Utrecht in January 2009.

For instance, on August 4, 2009, Takayuki Yagami asked Submitter-7: "have you put todays libors?" Submitter-7 wrote back: "nope you can set them if you like." Takayuki Yagami wrote back: "just sent it out now. thank you." On June 12, 2009, Takayuki Yagami messaged Submitter-7: "i sent a email about LIBORs... did you get it?" Submitter-7 wrote back: "i will input them," to which Takayuki Yagami responded: "thank you for your help!" In fact, Takayuki Yagami's control of the process was so significant that after Rabobank prohibited swaps traders from communicating about LIBOR rate setting with submitters on November 30, 2010, Takayuki Yagami explained to a broker: "Till two weeks ago I was seting libors for rabo but due to BBA investigation someone out side of europe shudnt have any influence of libors then I cudnt be involved in libors after then." 139

354. Takayuki Yagami's own supervisor, and the head of Rabobank's Yen derivatives desk in Tokyo, Tetsuya Motomura ("Trader-6"), was also aware of and intimately involved in Takayuki Yagami's conduct, directing requests to submitters through Takayuki Yagami to benefit Tetsuya Motomura's trading positions. For example, on October 8, 2008, Takayuki Yagami emailed Paul Robson with the subject line "Todays libors..." writing: "If is it ok,,, [Trader-6] would like todays 6m libor at 1.10%. Thank you very much for help." Paul Robson wrote back: "Ok skip." That day, as requested, Rabobank's 6-month Yen-LIBOR submission was 1.10, a decrease of ten basis points from its previous submission, whereas the other panel banks' submissions increased by approximately one and three-quarters basis points on average. Rabobank's submission went from being tied as the fifth highest submission on the Contributor Panel on the previous day to being tied as the twelfth highest submission on the Contributor Panel.

¹³

¹³⁹ Even after Takayuki Yagami was instructed not to influence Rabobank's Yen-LIBOR submissions, he continued to manipulate Yen-LIBOR with other Contributor Panel Banks.

- 355. Likewise, on July 24, 2008, Yagami wrote to Robson: "As for the today's libors. Could you set 6m at 0.97% please? [Tetsuya Motomura] has big fixings over the next couple of weeks so that it would be nice if you could keep it as low as possible for some time." Paul Robson responded: "Will do mate." That day, as requested, Rabobank's six-month Yen-LIBOR submission was 0.97, a decrease of three basis points. Rabobank's submission went from being tied as the sixth lowest submission on the Contributor Panel on the previous day to being tied as the second lowest submission on the Contributor Panel.
- 356. In a call on July 25, 2008, Tetsuya Motomura told a third party at another financial institution: "Sometimes if you want the LIBOR to be set, if you want today's LIBOR at a certain price, your desired number [would be achieved]." After the third party replied: "Really?" Tetsuya Motomura explained: "Well we are the ones who set [the LIBOR]." Tetsuya Motomura continued: "The recent 97 had been set at 97 due to my wishes," explaining: "That is obviously ... that's a little bad ... Well, anyway, the person with the strongest wishes gets to decide it [LIBOR]. Well, this is the way it is."
- 357. On occasion, other traders on Tetsuya Motomura's desk made requests when Yagami was absent. On May 25, 2009, Jeroen Beaard forwarded Yagami's out-of-office message to the junior trader on Yagami's desk ("Trader-8"). Trader-8 wrote back: "What can I help you ??" Jeroen Beaard responded: "Normally [Yagami] sends us his preferences for the JPY [Yen] libors. If you have any let me know." Trader-8 wrote back: "We don't have any special requests for libors today." The next day, Trader-8 replied again: "About libors.. Same as last Friday pls. if no particular int from others."
- 358. On occasion, Tetsuya Motomura also made requests directly to Rabobank's Yen-LIBOR submitters. For example, on August 4, 2008, Tetsuya Motomura messaged Paul Robson:

"Please set today's 6mth LIBOR at 0.96," continuing: "I have chunky fixing.... Thanks for your help," to which Paul Robson replied: "No worries mate." That day, as requested, Rabobank's six-month Yen-LIBOR submission was 0.96, a decrease of three basis points, whereas the other panel banks' submissions stayed approximately constant on average. Rabobank's submission went from being tied as the fourth-lowest submission on the Contributor Panel on the previous day to being the second-lowest submission on the Contributor Panel. Two days later, on August 6, 2008, Tetsuya Motomura messaged Paul Robson again: "I have another side of fixing today and tomorrow," continuing: "can we make 6mth LIBOR at 0.98?" Paul Robson wrote back: "Ok higher?...sure thing." Tetsuya Motomura responded: "Yes, only today and tomorrow...thanks." That day, Rabobank's six-month Yen-LIBOR submission was even higher than requested, 1.00, an increase of four basis points, whereas the other panel banks' submissions stayed approximately constant on average. Rabobank's submission went from being the second-lowest submission on the Contributor Panel on the previous day to being tied as the fourth-highest submission on the Contributor Panel. Rabobank's submission the next day remained the same, as did its submission's place on the Contributor Panel.

359. On Friday, August 8, 2008, Tetsuya Motomura messaged Paul Robson again: "Could you make it 6mth LIBOR at 0.97 today," explaining: "I have big fixing coming two weeks...." That day, as requested, Rabobank's six-month Yen-LIBOR submission was 0.97, a decrease of three basis points, whereas the other panel banks' submissions stayed approximately constant on average. Rabobank's submission went from being tied as the fourth-highest submission on the Contributor Panel on the previous day to being tied as the second-lowest submission on the Contributor Panel. Rabobank's submission remained the same on Monday, August 11, 2008, Tuesday, August 12, 2008, and Wednesday, August 13, 2008.

- 360. On August 14, 2008, Tetsuya Motomura messaged Paul Robson yet again and wrote: "Today and 19th Aug are the biggest fixing for us. Could you set 6m LIBOR at 0.93 today." That day, Rabobank's six-month Yen-LIBOR submission was 0.94, a decrease of three basis points, whereas the other panel banks' submissions stayed approximately constant on average. Rabobank's submission went from being tied as the seventh-lowest submission on the Contributor Panel on the previous day to being tied as the second-lowest submission on the Contributor Panel. On August 19, 2008, Rabobank's six-month Yen-LIBOR submission was 0.93, making it tied as the lowest submission on the Contributor Panel.
- 361. Other Rabobank traders continued to make requests as well. For instance, on June 25, 2009, another Yen trader ("Trader-7") emailed Submitter-7 and wrote: "could you set input for the Yen 6M libor very low today (65 or so). We have a very large fixing today in the 6 month's." That day, as requested, Rabobank's six-month Yen-LIBOR submission was 0.65, a decrease of six basis points from its previous submission, whereas the other panel banks' submissions decreased by approximately a basis point on average. Rabobank's submission went from being tied as the eighth-lowest submission on the Contributor Panel on the previous day to being tied as the second lowest submission on the Contributor Panel.
- 362. Traders and submitters did not hide the fact that traders had influence over the Yen-LIBOR submission process from their supervisors. The Head of Liquidity and Finance for Europe, and later Anthony Allen's replacement as Global Head of Liquidity and Finance ("Trader-9"), was informed that Takayuki Yagami would sometimes email the Yen-LIBOR submitter with requests. On December 9, 2008, Trader-9 emailed Anthony Allen and "Submitter-5," Paul Butler, with the subject line: "LIBORS." In the email, Trader-9 wrote: "Good to hear that [Submitter-8] is up and running. Short question: only question mark for me is

him sending out the daily Rabo Libor fixings. He told me that he will just 'copy, paste' the previous days Libors. Don't blame [Submitter-8] of course, but he has got no clue on this yet. What you think, is this going ok? Want to prevent that we get questions from BBA on this?" Paul Butler replied: "Yes [Submitter-8] is doing fine, regarding the libors," explaining that with: "the yen libors sometimes [Takayuki Yagami] will email from Tokyo to ask for any special requests."

- 363. In March 2009, when Rabobank conducted an operational audit of the Money Markets desks, the auditor, after meeting with Jeroen Beaard, wrote in her work papers that: "Jeroen Beaard also inputs the Yen-Libor rates on behalf of the Tokyo team to the BBA as they have no access to do this. They provide this via email." Within her work papers, the auditor included an email from Takayuki Yagami to Jeroen Beaard in which Takayuki Yagami sent LIBOR rates to Jeroen Beaard for submission.
- 364. During the Allen/Conti Trial, Rabobank's Yen-LIBOR submitter Paul Robson testified that it was "common sense" that making false Yen-LIBOR submissions to benefit Rabobank's Euroyen-based derivatives positions was wrong:

<u>Government [Sipperly]</u>: What did you do?

<u>Rabobank [Robson]</u>: I sought rates from brokers in the market and also biased those numbers at the request of traders.

<u>Government [Sipperly]</u>: When you say biased, do you mean after you figured out the rate from the brokers you would then favor it to help traders benefit on interest rate swaps?

Rabobank [Robson]: Yes, I would.

<u>Government [Sipperly]</u>: When you were doing this, did you think you were permitted to do this?

Rabobank [Robson]: No, I didn't think we were permitted to do it no.

Government [Sipperly]: So did you know if it was right or wrong?

Rabobank [Robson]: I thought it was wrong, yeah.

Government [Sipperly]: Why is it at that time that you understood it was wrong?

<u>Rabobank [Robson]</u>: It's pretty much common sense, really. We had privileged access to a number, a reference number, and we were using it to our own benefit. ¹⁴⁰

365. Robson continuously made false Yen-LIBOR submissions to benefit Rabobank's Euroyen-based derivatives positions even though he knew it was wrong. Over time, it became "standard practice" for Robson to make false Yen-LIBOR submissions upon Rabobank Senior Yen trader Takayuki Yagami's request. Robson testified that as time went on, Yagami just sent Robson submissions that would financially benefit his Euroyen-based derivatives positions and Robson directly submitted those numbers without consideration of Rabobank's actual cost of borrowing Yen:

<u>Government [Slipperly]</u>: And how would he ask you? If you could just give an example like in an e-mail or a call, the sort of thing he would say to you earlier in your relationship.

<u>Rabobank [Robson]</u>: In the early stages of the relationship, it probably would have been along the lines of, can you please or I would like or I need. So it would be kind of a statement about -- kind of a semi explanation of why he needed it as well.

<u>Government [Slipperly]</u>: Does there come a time when the relationship gets more comfortable?

<u>Rabobank [Robson]</u>: Yeah. It becomes, as I say, standard practice, so the conversations become condensed into just like a list of numbers.

Government [Slipperly]: Is that the way it happened in 2008 on?

<u>Rabobank [Robson]</u>: Yeah. I would have put those numbers straight in as a given that they would have been submitted. ¹⁴¹

¹⁴⁰ United States v. Allen, No. 14-cr-272, Transcript of Trial at 322 (Oct. 19, 2015).

¹⁴¹ Id. at 355-56.

d. Barclays.

366. From at least as early as August 2006 through approximately January 2007, then on another occasion in approximately June 2009, Barclays' Yen swaps traders made requests for favorable Yen-LIBOR submissions to Barclays' Yen-LIBOR submitters in order to benefit Barclays and the Barclays' derivatives traders' Euroyen-based derivatives positions. Barclays' Yen-LIBOR submitters accommodated the requests on some occasions. Specifically, between August 2006 and June 2009, the FCA (formerly FSA) determined that Barclays' derivatives traders made at least 26 requests to manipulate Barclays' Yen-LIBOR submissions.

e. Lloyds.

367. Over a period of three years, from 2006 to 2009, Lloyds' Yen-LIBOR submitter, Andy Doe, "routinely" made Yen-LIBOR submissions designed to benefit the positions of traders at Lloyds and other Contributor Bank Defendants. Lloyds' manipulation of LIBOR, including Yen-LIBOR, was known among its traders, and involved at least twelve individuals, including four managers. Multiple Yen-LIBOR submissions were manipulated, including at least one occasion in which a Lloyds trader not on the Money Market Desk made a request for a "low 3s" Yen-LIBOR submission, which Andy Doe factored in when making the bank's Yen-LIBOR submission to Thomson Reuters.

f. Deutsche Bank.

368. From 2005 through 2011, approximately twenty-nine Deutsche Bank employees, including senior management, derivative traders, and submitters manipulated Yen-LIBOR and Euroyen TIBOR from various offices, including New York, London, Frankfurt, and Tokyo. 142

DB Group Services employed all of Deutsche Bank's Euroyen-based money market derivatives

¹⁴² Ex. I-5 at 4.

("MMD") traders and pool traders that were located in London. Because Deutsche Bank's MMD and pool traders sat at the same GFFX desk, the traders were able to orally communicate favorable requests, as well as execute written requests, which were regularly taken into account by Deutsche Bank's submitters.¹⁴³ Deutsche Bank's submitters also openly solicited requests from traders to confirm that their false submissions would not be harmful to the traders' respective Euroyen-based derivatives positions.¹⁴⁴ This practice was well-known, with "Trader-11," Guillaume Adolph, telling another trader: "ON JPY WE TRY TO HAVE OUT LIBORS WITH OUR POSITIONS NOT AGAINS[T]."

369. Deutsche Bank was successful in manipulating Yen-LIBOR and Euroyen TIBOR. For example, over the course of two successive days, unidentified Derivatives Trader B and Submitter A manipulated one-month Yen-LIBOR higher and then lowered it the very next day:

April 4, 2006:

<u>Deutsche Bank Derivatives</u>

Trader B: . . . could u set 1m at 8bps [0.08] pls? thanks

Deutsche Bank Submitter A: done mate

April 5, 2006:

Deutsche Bank Derivatives

<u>Trader B</u>: Thanks mate... the 1m back to 7bps [0.07] today pls

Deutsche Bank Submitter A: affirmative 145

370. On each of these days, Deutsche Bank's one-month Yen-LIBOR submissions exactly matched Derivatives Trader B's request. ¹⁴⁶

¹⁴³ Ex. I-2 at 23.

¹⁴⁴ *Id*.

¹⁴⁵ Ex. I-3 at 13.

371. In another example, when Submitter-3's Euroyen-based derivatives positions were to reset or mature, he requested that Submitter-8 make a false Yen-LIBOR submission to benefit his trading book:

May 22, 2006:

<u>Deutsche Bank Submitter-3</u>: I've got a 3m jpy libor pay set today, could you go in low if it suits? thx

Deutsche Bank Submitter-8: YES SURE¹⁴⁷

- 2. Defendants Exploited the LIBOR Fixing to Maximize the Impact of their False Yen-LIBOR Submissions
- 372. Defendants exploited the fact that a certain number of quotes were discarded before the published rates were calculated to skew the average calculation in their favor. For example, by intentionally making false Yen-LIBOR submissions that were so high or low that they were excluded from the middle 50% of the Yen-LIBOR submissions used in the fixing calculation, Defendants manipulated Yen-LIBOR by knocking another contributor's submissions into the middle 50%. As UBS' senior Yen trader, Tom Hayes, explained in his SFO interviews:

So, the way you would influence the actual published LIBOR rate was by dropping in and out of the pack. So you'd either want to be in the top quartile or the bottom quartile...All you'd want to do is drop out, so someone who is, you know in somewhere else within the region would come in and the rate would move very, very slightly.

373. The impact of dropping in and out of the fixing was quantifiable. Below Hayes explained to his stepbrother, Peter O'Leary, a trader at Defendant HSBC, how a single false Yen-LIBOR submission in the "bottom four," *i.e.*, the four lowest quotes excluded from the calculation, would manipulate the fix by an eighth of a basis point:

¹⁴⁶ *Id*.

¹⁴⁷ Ex. I-1 at 48.

April 20, 2007:

Hayes: You know how LIBOR's set yeah? Panel of sixteen...

O'Leary: Yeah

<u>Hayes</u>: Cut the top four off. So if he [HSBC] sets it in the bottom four, it move it by an eighth of a basis point, which on the size of the fix I've got is worth like a hundred and twenty five thousand bucks.

374. Traders at other banks, including Rabobank, also knew that a single Yen-LIBOR submission in the top or bottom 25% of the Yen-LIBOR could move the entire fixing. For example, at the Allen/Conti Trial, former Rabobank trader Lee Bruce Stewart testified that a low LIBOR submission that was excluded from the fix still manipulated the LIBOR fix lower:

October 19, 2015:

Government [Young]: Does a single LIBOR submission have the potential to impact the overall fix, even if it gets averaged out of the eight?

<u>Rabobank [Stewart]</u>: Yeah. If you were low balled – if you were low balling LIBOR, **the average was automatically come down** because the fifth lowest would be taken into consideration. ¹⁴⁸

375. Rabobank's Yen-LIBOR submitter Paul Robson corroborated this testimony at the Allen/Conti Trial. Robson testified that one false submission would impact the entire Yen-LIBOR fix even if it was outside of the middle 50%:

Government [Slipperly]: Let say the LIBOR was trending lower but they wanted high, was there a way to accommodate [the traders] under those circumstances?

Rabobank [Robson]: Yes. Even if the rates were going down, if you could – if rates were still going down, you could just not set as level one as everybody else was setting; or if you could, leave your rate unchanged. When the band of rates was moving down, even if the bank of rates was moving down, you could still set your rate towards the top of that band to kind of limit the damage of the rates going down.

¹⁴⁸ United States v. Allen, No. 14-cr-272, Transcript of Trial at 258 (Oct. 19, 2015).

Government [Slipperly]: And just in the general context, would one bank's submission be able to affect the rate so that if you were to set a favored rate, would one bank's submission be able to move the LIBOR rate ultimately?

Rabobank [Robson]: It could be, yes. 149

376. Traders at RBS also utilized this manipulative technique. For example, on March 27, 2008, RBS traders discussed how they needed to be the "highest among all" to manipulate the three-month and six-month Yen-LIBOR fixings higher. In accordance with this request, RBS increased both its three-month and six-month Yen-LIBOR submissions on March 28, 2008, moving from the lowest quote included in the average calculation for both tenors, to being excluded from both fixings for being too high:

March 27, 2008:

<u>RBS [Tan]</u>: tomorrow we need to bump it [six-month Yen-LIBOR] way up high...highest among all if possible

RBS [Danziger]: we need to bump all the way in 3mth libor tomorrow as well

<u>RBS [Danziger]</u>: we will put it in tomorrow morning and no one will touch it i promise you¹⁵⁰

377. Defendants used this technique when they needed to manipulated Yen-LIBOR in a specific direction very quickly, for example, during "Operation 6M," when Defendants planned to keep six-month Yen-LIBOR artificially higher until August 2009 and then rapidly cause the rate to decrease. $See \P 685-690$, infra.

¹⁴⁹ *Id.* at 343-44.

¹⁵⁰ Ex. B-1 at 13.

- C. The Contributor Bank Defendants Colluded With the Broker Defendants to Successfully Manipulate Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives. ¹⁵¹
- 378. Inter-dealer brokers, sometimes known as voice brokers, act as intermediaries between buyers and sellers in the money markets and derivatives markets. The brokers match buyers and sellers in return for commissions, and also can be an important source of market information for banks. Typically, commissions are based on a percentage of the notional value of consummated transactions, which means that brokers get paid more by brokering larger trades. Within a brokerage firm, there are brokers for different currencies who intermediate derivatives transactions ("Derivatives Brokers") and brokers who intermediate cash transactions ("Cash Brokers"). In order to find matching counterparties, brokers provide bid or offer prices for a financial transaction. Those prices are conveyed in multiple ways. For example, brokers can use a "squawk box," *i.e.*, a speakerphone-like device that can speak simultaneously to multiple banks' trading desks, to broadly disseminate bid and offer prices. Brokers also frequently use Bloomberg instant message chats and other messaging platforms, email, and dedicated telephone lines to contact their clients.
- 379. Below is an example of a chat conversation between Rabobank trader Takayuki Yagami and R.P. Martin Broker Paul Robson, who previously worked as a Rabobank trader and submitter, demonstrating how inter-dealer brokers normally handle transactions in the over-the-counter market. After Robson makes some opening price quotes, Yagami bids for a "T/N" or "Tomorrow-Next" Yen-denominated deposit ("PAY 0.01 in T/N"). Following the initial offer, Robson proceeded to offer prices, working with his other clients, until he found a counterparty willing to accept Yagami's bid:

¹⁵¹ See also Exs. C-1, C-2, E-1 (pp. 10-14) and E-2, passim.

^{152 &}quot;Tomorrow-Next" is the duration of the deposit and indicates it will begin tomorrow and reverse the next day.

May 7, 2008:

<u>R.P. Martin [Robson]</u>: hi chaps good afternoon to you! 1-6m tonars at mo only 10 3/4 offers trying for better . . .

Rabobank [Yagami]: PAY 0.01 In T/N

R.P. Martin [Robson]: try skip cheers!

R.P. Martin [Robson]: at mo depo offered at 05 poss 04 - trying for u at 01

R.P. Martin [Robson]: tn depo 04 02 - bid by bid german

R.P. Martin [Robson]: 03 offer th depo

R.P. Martin [Robson]: got offer at 02 in tn - not sure of size

<u>R.P. Martin [Robson]</u>: still got german bid there fyg [for your guide]

R.P. Martin [Robson]: can i just ask if u are still ok paying .01 tn deep

R.P. Martin [Robson]: checking you in 20 yds [20 billion] if ok?

Rabobank [Yagami]: sure!

R.P. Martin [Robson]: ok got 20 yds for you so far in tn jpy depo at 0.01

Rabobank [Yagami]: thank you. agreed

R.P. Martin [Robson]: cheers mate, great!

380. Inter-dealer brokers, including the Broker Defendants, also provided clients with their views and advice on market pricing and trends. Because brokers spoke to multiple clients at different financial institutions and share internally the information learned from clients, they have particular market insight about cash market prices and trends in otherwise opaque markets, offering an important price discovery function. For example:

May 14, 2009:

<u>Rabobank [Yagami]</u>: Do you have any offers in 1m 3m and 6m today FMG [for my guide]?

R.P. Martin [Robson]: let me see what I can get for you skipper!

R.P. Margin [Robson]: 05 give t/n + s/n combined...best 1m 17,,,,3m poss 35 offr...6m only 60

Rabobank [Yagami]: cheers mate

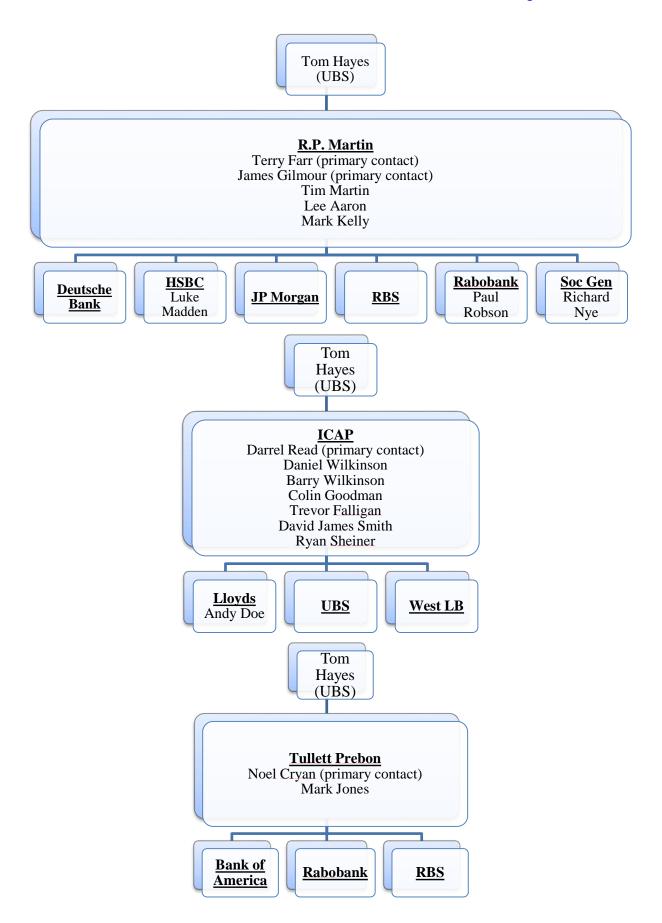
381. In providing this market information, inter-dealer brokers implicitly represented that such market information reflected their third-party unbiased assessment of borrowing costs and market pricing based on objective, observable data, some of which they uniquely possessed. It was important that the information remain unbiased because, as one trader/submitter, Laurence Porter from Citibank, testified during the Hayes Trial, LIBOR submitters often relied on information provided by inter-dealer brokers in violation of BBA Guidelines when making their Yen-LIBOR submissions because, in theory, the brokers had the best understanding of market prices. The Contributor Bank Defendants capitalized on this, conspiring with the Broker Defendants to disseminate false pricing information to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives for their financial benefit. See ¶¶ 386-411, infra.

- 1. UBS Colluded With the Broker Defendants to Manipulate Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives¹⁵³
- 382. Hayes coordinated on almost a daily basis with several inter-dealer brokers employed by at least five different brokerage firms to manipulate the Yen-LIBOR and, on occasion, Euroyen TIBOR submissions of other panel banks. Hayes and the brokers utilized multiple manipulative techniques, including: (i) disseminating false "run thrus" of suggested Yen-LIBOR submissions to many, if not all, of the panel banks; (ii) contacting other Contributor Bank Defendants' submitters; (iii) publishing false cash market rates on electronic screens

¹⁵³ See also Exs. A-1, pp. 17-25, ¶¶ 40-61; A-2, pp. 20-36; C-1, C-2, E-1, and E-2, passim.

available to clients; and (iv) "spoofing" or making fake bids and offers. The charts below display Hayes' relationship with the Broker Defendants as described in his SFO interviews.

These charts were displayed at Hayes' Trial and include his primary contacts at each broker and the Contributor Bank Defendants for which U.K. regulators found documented evidence of manipulative conduct. These charts represent the "tip of the iceberg" regarding the scope of the Broker Defendants' conspiracy with the Contributor Bank Defendants:



These brokers were specifically chosen for their ability to provide information on the "cash market," i.e., the rates at which banks were offering to borrow and lend the very Yendenominated deposits that were supposed to underlie their Yen-LIBOR and Euroyen TIBOR

submissions, as well as their relationship with (and thus their ability to influence) traders and

submitters at specific Contributor Panel Banks.

383.

384. Working with multiple Broker Defendants allowed Hayes and his co-conspirators to gain maximum influence over the market by reaching as many banks as possible. For example, Hayes worked with Terry Farr at R.P. Martin because he had good relationships with HSBC and Lloyds, in addition to contacts at Deutsche Bank, Bank of Tokyo-Mitsubishi, Merrill Lynch, Norinchukin, BNP Paribas, Royal Bank of Canada, Rabobank, RBS, and Société Générale. ICAP provided access to other banks, including contacts at JPMorgan, West LB, and other smaller banks, while Tullett Prebon had access to Bank of America's Yen-LIBOR

January 7, 2007:

submitter, among others.

From: Tom Hayes

To: Yvonne Murayama (UBS)

Cc: Michael Pieri

Can we have a chat about the ICAP bro deal when its convenient?...From my perspective ICAP offers me a lot of value in helping with London Libor resets, traders with London CP's (eg Chase) and with smaller European names. Hence I am keen to keep a line with them.

As alleged further below, in exchange for their critical assistance, Hayes 385. compensated the Broker Defendants in various ways, including by directing commissiongenerating business to the brokers, such as wash trades, and even by having UBS structure fees to carve out cash bonuses to reward brokers for manipulative conduct. Hayes also kept them in line by sometimes threatening to move his considerable volume of business to another broker.

During this period of late 2006 to late 2009, Hayes made approximately 1,200 manipulative requests to brokers.

a. "Suggested LIBORs"

386. Hayes used several inter-dealer brokers to disseminate false information about Yen-LIBOR and Euroyen TIBOR to other panel banks, expecting that the other banks would rely on that information when they made their own submissions and UBS and Hayes thereby financially benefitted from the resulting the manipulated rate. For example, some brokers including the Broker Defendants circulated via email or by telephone each morning daily run thrus containing, in addition to other pricing information, where they expected Yen-LIBOR to be fixed that day. The Broker Defendants, also at times, shared with Contributor Bank Defendants the intended LIBOR submissions of other panel banks.

387. During the Class Period, Defendant ICAP routinely disseminated run thrus with Euroyen market pricing information every morning at approximately 7:00 A.M. London time, well before the BBA's 11:00 A.M. Yen-LIBOR submission deadline. The run thrus contained the following: (1) a column stating where rates (prices) in basis points for Yen cash trades, for all tenors, were observed the previous trading day, broken down by Japanese and non-Japanese financial institutions; (2) a column stating the spread of rates for Yen cash trades for all tenors that were observed as of the market opening in London and late afternoon Tokyo, broken down by Japanese and non-Japanese financial institutions; and (3) a column titled "Suggested LIBORs," which contained "Cash Broker 1" Colin Goodman's suggestions as to the level of Yen-LIBOR for each tenor between one month and one year. Below is an example of a Yen run thru taken from ICAP's CFTC settlement that was sent on January 2, 2007:

¹⁵⁴ See Ex. C-1, pp. 6-15.

01/02/2007 From: [Casl		•							
	ay, January	2, 2007 7:06 AM ds2/l							
	GOOD MO	RNING YEN RUN TI	HRU						
	TODAY	YESTERI	DAY						
	Japanese	Japanese			ED LIBOR				
	T/N	35 33	T/N	46 43		IM	0,47375		
	S/N	35 33	S/N	40 35		2M	0.535		
	l Wk	36 34	l Wk	37 35		3M	0.5675		
	2Wk	37 35	2Wk	37 35		4M	0.59125		
	3Wk	42 39	3Wk	42 39		5M	0.61		
	lm	47 45	lm	47 45		6M	0.63		
	2m	56 53	2m	53 50		9M	0.695		
1	3m	59 56	3m	57 54		IJYR	0.7525		
	4m	61 58	4m	59 56					
J	5m	63 60	5m	62 59					
	6m	66 63	6m	64 61					
	9m	72 69	9m	69 66					
	lyr	78 75	1yr	76 73					
	Non Japane	ese	Non Japan						
	T/N	34 32	T/N	46 45					
	S/N	34 32	S/N	42 48					
	i Wk	35 33	IWk	38 35					
	2Wk	38 35	2Wk	38 35					
	3WK	42 38	3Wk	42 38					
	lm	46 43	1m	47 44					
	2m	53 50	2m	52 49					
	3m	56 53	3m	56 53					
	4m	58 55	4m	58 55					
	5m	60 57	5m	60 57					
	6m	63 60	6m	62 59					
	9m	69 66	9m	67 64					
	lyr	75 72	lyr	75 72					
	cd	no trades	cd	no trades					
	o/n	exp .26	o/nite	exp ,26					
	lam3	745 735	lam3	7325 7275					
	lam6	755 745	1am6	74 73					
	2ут	93625 92625		2yr	955 95				
		CHEERS [Cash Broke	r 1]						

i. ICAP Brokers Provided Critical Assistance by Disseminating False and Misleading "Suggested LIBORs"

- 388. In the fall of 2006, shortly after Hayes joined UBS, he became a client of ICAP "Derivatives Broker 1" Darrell Read. Hayes quickly became known as a high volume, aggressive, and dominant Euroyen-based derivatives trader who injected significant liquidity into a previously illiquid market. Because he commanded a large trading volume, Hayes was a highly desirable and sought-after client for inter-dealer brokers, including the Broker Defendants
- 389. Darrell Read, who was based in London at that time, agreed to work overnight (Tokyo is eight hours ahead of London) to better serve Hayes during Tokyo business hours and became Hayes' primary contact at ICAP. As a result, Read gave up his other London-based

clients, and by early 2007, relied almost exclusively on Hayes and UBS for their business and resulting commissions.

- 390. Darrell Read routinely and aggressively assisted Hayes' efforts to manipulate Yen-LIBOR and the prices of Euroyen-based derivatives. When Read was out of the office, other Yen derivatives brokers on ICAP's Yen Desk, primarily Trevor Halligan ("Derivatives Broker 2") or Danny Wilkinson ("Yen Desk Head") coordinated with Hayes on his requests to manipulate Yen LIBOR and/or Euroyen TIBOR; at times other brokers on the Yen desk helped him as well.
- 391. To accomplish Hayes' manipulative goals, Read needed and obtained the critical assistance of Colin Goodman. Goodman, one of ICAP's cash brokers, had long-standing relationships and daily contact with many of the Yen panel bank submitters. He often discussed with submitters what their intended Yen-LIBOR submissions would be and what other panel banks might submit. Goodman also issued the daily Suggested LIBORs as part of his run thrus which Yen-LIBOR submitters improperly relied upon in whole or in part at times to make their Yen-LIBOR submissions.
- 392. As early as October 2006, Darrell Read, acting on Hayes' behalf, began asking Goodman to skew the Suggested LIBORs that he provided in his run thru emails or in calls to traders or submitters to reflect the rates or levels that Hayes desired. For example, during his interview with the SFO, Hayes stated that Colin originally reached out to him and said that he would contact Wilkinson to get him to try and influence the rates by sending run thrus that were a bit lower or "whatever."
- 393. Goodman knew from the outset that such requests were for Hayes. At times, Hayes reached out to Goodman directly, such as on March 23, 2007: "hi [Colin] know [Darrell]

is away and this may seem strange given my recent requests but really need a high/unchanged 1m libor today, low for everything else. thanks as always [Hayes]."

- 394. The skewed Suggested LIBORs that Goodman sent to Yen-LIBOR submitters as part of his daily run thrus were the primary and most effective method by which certain ICAP brokers assisted Hayes in his efforts to manipulate Yen-LIBOR. ICAP's run thrus were widely circulated among and valued by Yen market participants at the panel banks and elsewhere. More than 100 cash and derivatives traders received Goodman's run thru emails, including traders from nearly all of the Yen-LIBOR panel banks and, at different times, submitters from at least eleven of the sixteen Yen-LIBOR panel banks. Many, if not all of the recipients of the run thrus, asked to receive the emails. Goodman even sent skewed Suggested LIBORs to Bank of England staff.
- 395. ICAP's Yen brokers, Hayes, and others believed that Colin Goodman's Suggested LIBORs directly influenced the Yen-LIBOR submissions by panel banks. For example, below are several communications sent by Read to Hayes, touting the efficacy of ICAP's run thrus: 155
 - [Colin] has been doing a number on some of the contributors because a couple of them were edging their libors slightly lower yesterday before he intervened;
 - morning mate ... seems [Colin's] cover does have some influence, people actually took notice of his 87 libor! Will be back on his case again today;
 - i hope that 6m libor has got me back in your good books! I used all my powers of persuasion on that one;-) ... think [West LB and Citibank] must have looked at [Colin's] first suggestion they both moved up 11bps to 1.10; and
 - you have a really big fix tonight i believe? if [Colin] sends out 6m at a more realistic level than 1.1 0 i reckon [West LB and Citibank] will parrot him, it might mean 6m coming down a bit.

¹⁵⁵ *Id*. at 11.

396. Yen-LIBOR submissions data shows that at least several panel banks considered

the run thrus when making their Yen-LIBOR submissions, and at times, submitted the exact rates

that Goodman suggested. For example, West LB's one-month, three-month, and six-month Yen-

LIBORs were identical to Goodman's Suggested LIBORs on ninety percent of days in 2007, and

eighty percent of days in 2008, while Citibank's one-month, three-month, and six-month Yen-

LIBOR submissions matched the Suggested LIBORs on eighty percent of days in 2008, and

seventy percent of days in 2009. 156

397. ICAP also revised its Suggested LIBORs, sending a new email that was tailored

to Hayes' needs. For example, in the September 4, 2007 chat below, Hayes contacted Darrell

Read to set up a series of false run thrus to manipulate Yen-LIBOR artificially higher while he

was away:

September 4, 2007:

<u>UBS [Hayes]</u>: ...need 3m high v badly or at least unchanged have some big

fixings whilst i am away

ICAP [Read]: ...will be on [Colin Goodman's] case...

UBS [Hayes]: ...mate can we try to get 3m higher today

ICAP [Read]: yes mate ... I will be doing all i can 157

398. Read forwarded Hayes' request to Goodman in an email with the subject "3mos

libor going to the moon!" In the exchange with Read below, Goodman agreed to send out his

run thru with three-month Yen-LIBOR "at 96," one basis point higher than his honest assessment

of market prices:

¹⁵⁷ *Id.* at 14.

147

¹⁵⁶ *Id*.

September 4, 2007:

<u>ICAP [Read]</u>: Hi [Colin], Can you please sent 3mos ligot out higher please. Thanks

ICAP [Goodman]: THESE LOOK WAY DOWN...3M SHUD BE 95

<u>ICAP [Read]</u>: Thanks [Colin]...\$ cash is firmer though? Try and sent it out at 96 if you can please

ICAP [Goodman]: OF COURSE¹⁵⁸

399. After the daily run thru email was sent, Read contacted Goodman's junior broker and Yen Desk Head Danny Wilkinson via Bloomberg chat to ask for a "revised libor run" with three-month and six-month rates moved even higher:

September 4, 2007:

<u>ICAP [Read]</u>: want libors up today...big fix in 3mos so that is most important...thanks

ICAP [Ryan Sherer]: cheers [Read]

ICAP [Read]: got [Colin's] libors thx

<u>ICAP [Ryan Sherer]</u>: lib 1m-80, 3m-96, and 6m-05 is what he has sent out thinks 3m is 95 and 6m 06 fyg [for your guide]

<u>ICAP [Read]</u>: ...try and get [Goodman] to send out a revised libor run with 3m and 6m higher please [Danny Wilkinson]...ta

ICAP [Wilkinson]: will do 159

400. Goodman complied and distributed a "REVISED LIBORS" email with three-month Yen-LIBOR moved two basis points higher from 0.96 to 0.98 and six-month Yen-LIBOR three basis points higher from 1.05 to 1.05, as displayed below: 160

¹⁵⁸ *Id*.

¹⁵⁹ *Id*.

¹⁶⁰ *Id*. at 15.

From: [Cash Broker 1] Sent: Tuesday, September 4, 2007 9:27 AM Subject: REVISED LIBORS 1M 0.82M 0.86 3M 0.98 4M1.02 5M 1.05 6M 1.08 9M 1.12 1.15 1YR

- 401. Submitters at panel banks that tried to make Yen-LIBOR submissions reflecting an assessment of the cost of borrowing Yen in the inter-bank money market may have made false or misleading Yen-LIBOR submissions because they relied on ICAP's purported run thrus. Their reliance on ICAP brokers meant that their submissions did not actually reflect their borrowing costs, but rather the artificial rates that Colin Goodman sent. The ICAP brokers believed that the wide dissemination of and reliance on the Suggested LIBORs would increase the chances that they would at times be successful in manipulating Yen-LIBOR submissions, and thereby Yen-LIBOR, for Hayes and others. This was the "libor service" (as coined by the brokers involved) they provided to Hayes.
- 402. ICAP Yen brokers gloated over their influence on the Yen market and the Yen-LIBOR fixings. They referred to panel banks as "copying" Goodman's Suggested LIBORs, and called them "sheep" because they followed wherever the run thru led them ("[Colin] sending out higher than he thinks so hopefully the sheep will just copy" (emphasis added)).

 Goodman believed and boasted that a number of banks were copying his Yen-LIBOR recommendations and referred to himself, as did other ICAP brokers, by various nicknames including "Mr. LIBOR," "Lord LIBOR," "Lord Bailiff" and "M'Lord." ICAP broker Darrell Read also believed Goodman was successful in "moving the market" on a number of occasions.

- 403. Communications between the ICAP Yen brokers and Hayes, in addition to conversations among ICAP brokers, reflect ICAP's willingness and significant efforts to help Hayes. *See e.g.*, ¶¶ 513-525, *infra*. The communications also reflect the ICAP brokers' and Hayes' belief that they had an impact on the Yen-LIBOR fixings, that Goodman's suggested rates did not always reflect his true and objective assessment of Yen-LIBOR levels, but were designed to help Hayes. Hayes highly valued the ICAP brokers' special LIBOR services and was willing to pay for them, with gratuities like a curry meal, champagne, additional commission-generating trades, or bonuses as the relationship developed over time.
 - ii. BBA Guidelines Expressly Prohibited the
 Contributor Bank Defendants From Relying on
 Inter-Dealer Brokers' Market Color When
 Making Yen-LIBOR Submissions
- 404. BBA guidelines issued in October 2009 provided that LIBOR submitters "should not ask intermediaries where they believe LIBOR rates will set on a given day and use this as a basis for submissions. This misses the point of the benchmark, and is a circular process that would rapidly lead to inaccurate rates." Yet several Yen-LIBOR Contributor Banks relied on the Broker Defendants' run thrus when making their Yen-LIBOR submissions, and at times, some banks simply submitted the very rates Defendant ICAP suggested. *See* ¶¶ 394-396, *supra*.

b. Publishing False Market Rates to Panel Banks on Broker Screens

405. Hayes and the Broker Defendants also falsified the purported prevailing market rates that the Broker Defendants displayed on electronic screens made available to the Broker Defendants' clients, including other panel banks. The screens were supposed to show the actual prices of cash or derivatives products, which panel banks then could take into consideration in determining Yen-LIBOR submissions. Hayes had the Broker Defendants report false prices on the screens in an effort to skew other banks' Yen-LIBOR submissions and the prices of Euroyen-

based derivatives. For example, in the conversation below, ICAP broker Darrell Read and Hayes discussed how ICAP would display false prices "as the futures open" to influence other panel bank submissions:

June 3, 2009:

UBS [Hayes]: can you get the swasp [swaps] on the screen all lower lyl8m2y3y ...

 \underline{ICAP} [Read]: will move the screen as the futures open , you lioke low everything? 161

406. Hayes and ICAP used this tactic, among many others, later that same month during "Operation 6M" to help manipulate six-month Yen-LIBOR during June 2009:

June 24, 2009:

ICAP [Read]: Morning [Tom], Rbs must have had some fixings, not helping

<u>UBS [Hayes]</u>: he on drugs for once I just want them static and they are falling!...pls try to keep 1y low on screen mate yeah I just need thgis 6m gap for 2weeks

ICAP [Read]: will do my best

<u>UBS [Hayes]</u>: then they can all go down hopefully tibor will stay high operation 6m

ICAP [Read]: ;-)¹⁶²

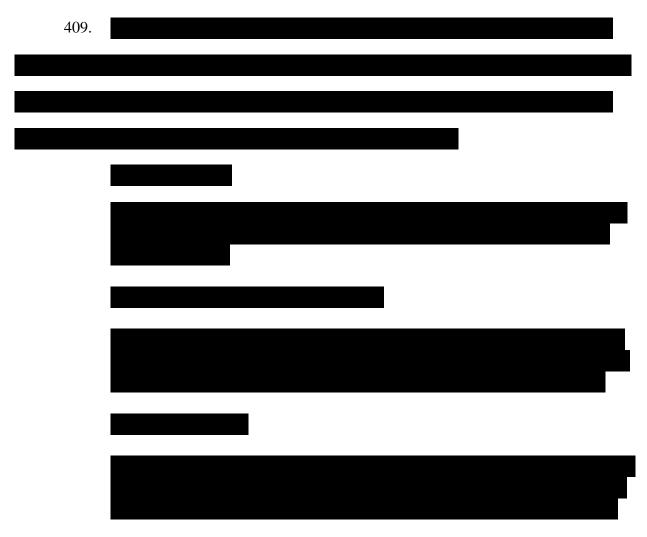
407. Because each Broker Defendant's screens were available to several, if not all, of the Yen-LIBOR panel members and the submitters used this information at times in determining submissions, dissemination of false prices had the potential to influence many of the Yen-LIBOR and Euroyen TIBOR submissions on any given day.

¹⁶¹ Ex. A-2 at 26.

¹⁶² *Id.* at 31.

c. "Spoofing": Publication of False Bids and Offers

408. The Contributor Bank Defendants and Broker Defendants also conspired to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives by disseminating false bids and offers, which they called "spoofs." Defendants disseminated spoof bids and offers through various means including the Broker Defendants' squawk box, *i.e.*, a speaker phone-like device connected to multiple Euroyen-based derivative trading desks, and through OTC electronic exchange systems that Euroyen-based derivatives traders utilized. This amplified the effects of Broker Defendants' manipulative conduct by reaching multiple traders at multiple Yen-LIBOR and Euroyen TIBOR panel banks simultaneously.



410. In another example, revealed during the Hayes Trial, Farr told Hayes that he has been offering false prices all day in furtherance of the conspiracy:

April 16, 2009:

R.P. Martin [Terry Farr]: I've been offering them out at 25 today

<u>UBS [Hayes]</u>: Oh, brilliant

R.P. Martin [Terry Farr]: Yeah, yeah. So

UBS [Hayes]: Is that genuine?

R.P. Martin [Terry Farr]: No

411. Later that year, during a June 10, 2009 electronic chat, Hayes and Farr again referred to "spoofing" when discussing efforts they would make to manipulate the Yen-LIBOR "game" that day:

June 10, 2009:

<u>UBS [Hayes]</u>: LOW 1m [Yen-LIBOR] . . . LOW 3m [Yen-LIBOR]. . . HIGH 6m . . . 6m [Yen-LIBOR] is important today mate . . . pls spoof bids

R.P. Martin [Farr]: rite ok mate ill make a special effort 164

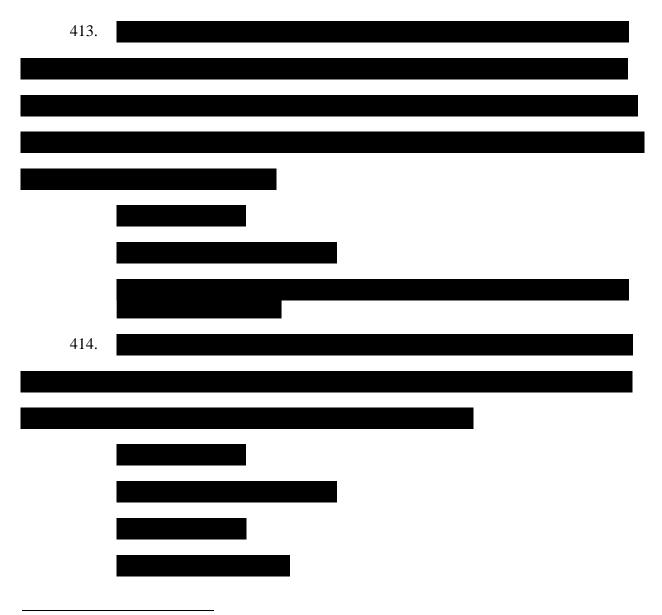
<u>R.P. Martin [Farr]</u>: mate yur getting bloody good at this libor game . . . think of me when yur on yur yacht in monaco wont yu

- 2. The Broker Defendants Were Active Co-Conspirators with the Contributor Bank Defendants
- 412. The Broker Defendants actively conspired with the Contributor Bank Defendants to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives

¹⁶³

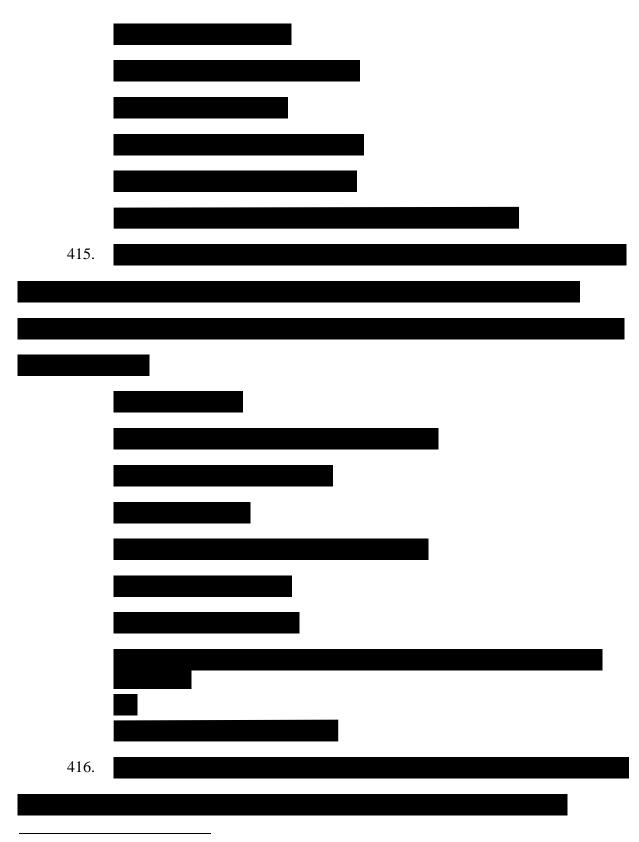
¹⁶⁴ Ex. A-1 at 24.

through multiple means. As an example of how Defendants coordinated their manipulative conduct, the conversations below track the manipulation of three-month Yen-LIBOR on February 25, 2009. The electronic communications used to carry out this manipulation were at least in part "transmitted through, among other locations and facilities, a UBS server located in Stamford, Connecticut" and served as the basis for UBS Securities Japan's guilty plea to wire fraud in the District of Connecticut. ¹⁶⁵



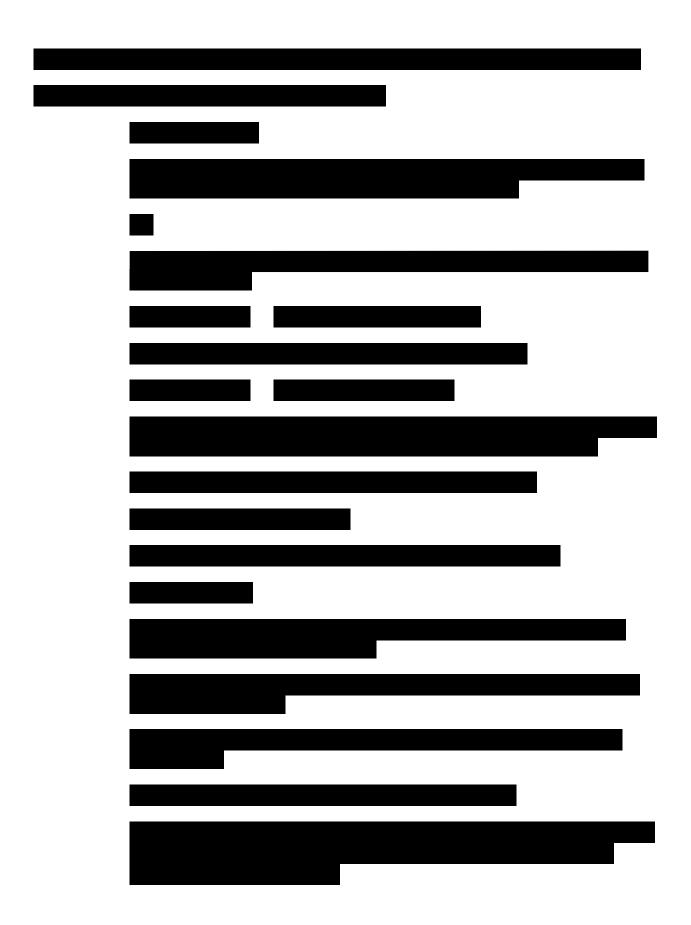
¹⁶⁵ Ex. A-5, Factual Basis for Pleas at ¶ 11.

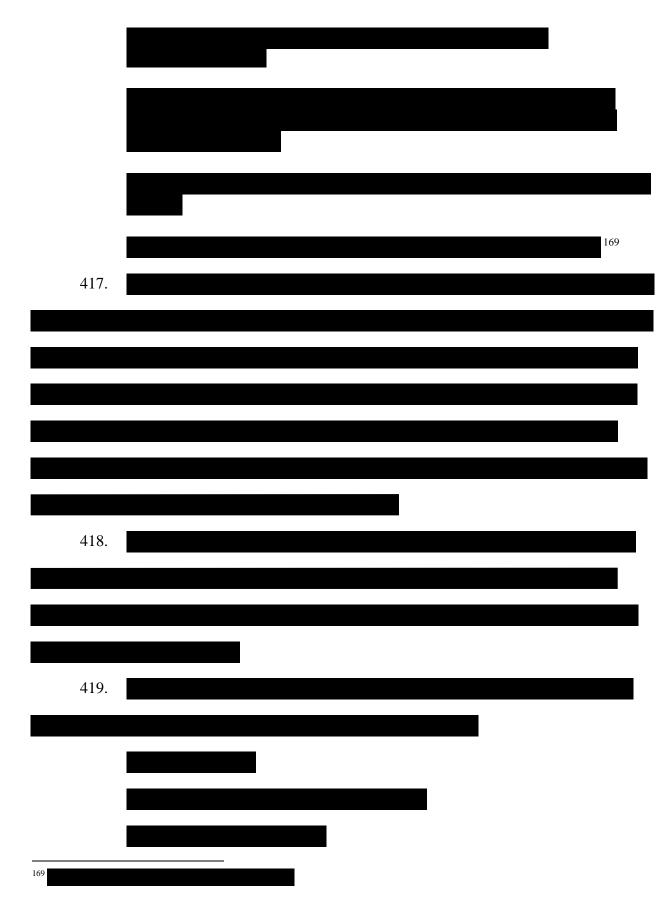
¹⁶⁶

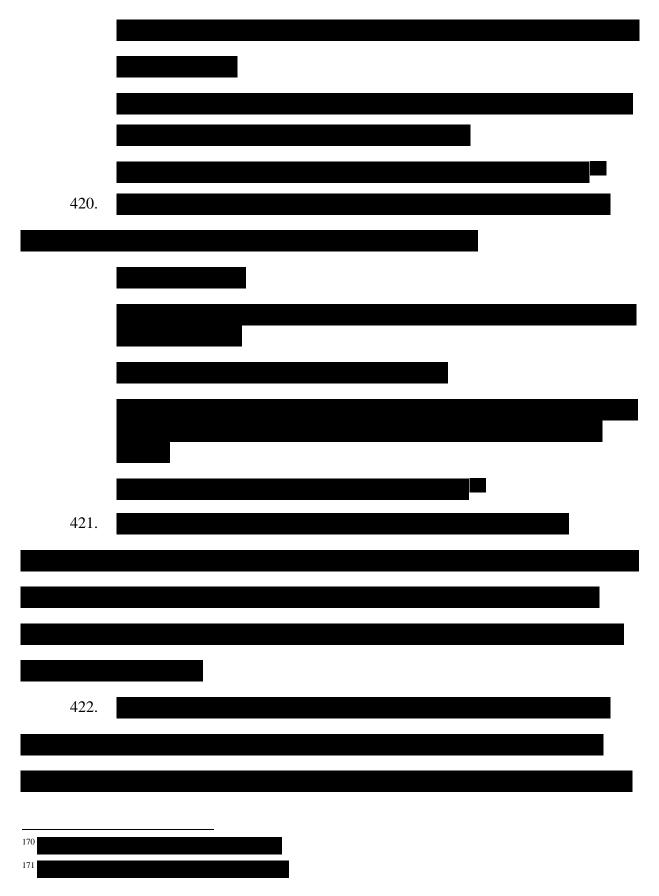


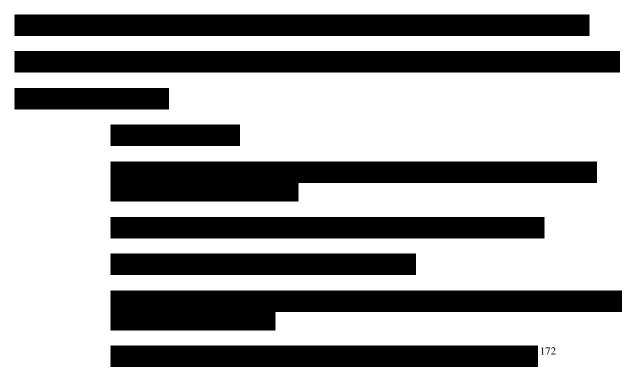
¹⁶⁷ *Id*.

¹⁶⁸ *Id*. at 1-2.









- 423. This successful concerted effort is just one examples of how Defendants systematically organized using the Broker Defendants to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. Other example of coordinated misconduct involving the Broker Defendants, including at least three known long-term manipulation campaigns, are included below. *See* ¶¶ 649-690, *infra*. Plaintiffs reasonably expect that additional examples of this type of coordinated manipulation will be uncovered in discovery.
 - 3. The Contributor Bank Defendants Knew the Broker Defendants Were Actively Aiding and Abetting the Manipulation of Yen-LIBOR.
- 424. Hayes' use of brokers to manipulate Yen-LIBOR was widely known among the traders on the UBS Yen trading desk from 2007 through 2009. In fact, the desk held daily morning meetings before Yen-LIBOR was set, in which Hayes commonly announced the direction he intended to manipulate Yen-LIBOR that day.

¹⁷²

- 425. After Hayes left UBS in September 2009, the more junior trader who replaced him had discussions with the manager of the Yen trading desk. Based on those discussions, the junior trader felt pressured to continue using brokers to manipulate Yen-LIBOR through at least January 2010.
- 426. UBS' Yen-LIBOR submitters, derivatives traders, and their managers knew this conduct was wrong and attempted to avoid creating evidence of the manipulation. For example, the manager of the Yen derivatives desk cautioned that they should avoid creating written records and should instead use cell phones when contacting brokers. Moreover, to avoid detection of their manipulation, UBS derivatives traders and brokers used coded language in communications to discuss the dissemination of misinformation to other Contributor Panel Banks to influence the ultimate Yen-LIBOR fix.
 - D. The Broker Defendants Reaped Commissions, Bonuses and Accepted Bribes in the Form of Wash Trades from the Contributor Bank Defendants for Their Critical Assistance in the Manipulation of Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives 173
- 427. Hayes sought to ensure the Broker Defendants' cooperation by offering drinks and bottles of champagne, commission-generating business, and large cash bonuses for a Broker at Defendant ICAP. The Broker Defendants were compensated for their assistance in several ways: (1) providing them with substantial amounts of business, thus generating fees or commissions; (2) by engaging in circular transactions (two equal and opposite transactions that canceled each other out) solely for the purpose of generating commissions for the brokers; and/or (3) by engineering a special compensation deal between UBS and Broker Defendant ICAP.

¹⁷³ See also Exs. B-4 at 21-24; C-1, C-2, E-1 at 15-18 and E-2, passim.

for whom UBS generated significant commissions by threatening to cut off UBS' business with the brokerage if the firm did not comply with his requests.

1. Extra Trades to Generate Unearned Commissions

- 428. Hayes routinely offered brokers at ICAP, Tullett Prebon, and R.P. Martin extra transactions or other business, and thus UBS paid commissions to ensure that the Broker Defendants would provide needed assistance. For example, Hayes told inter-dealer brokers employed by the Broker Defendants:
 - "I still owe you some deals;"
 - "we'll do some big tix soon i promise;"
 - "do the bisness and i'll sort you out MASSIVE;"
 - "if you get 3m down you'll get a decent deal from me tomorrow;"
 - "if you manage that for the next 2 weeks you will see the benefits;"
 - "make sure they know that it pays for them to help out;" and
 - "i need to pay .. to give u a trade."

2. Gifts and Other Bribes

429. The Broker Defendants were also rewarded for manipulating Yen-LIBOR and/or Euroyen TIBOR and the prices of Euroyen-based derivatives with gifts, free meals, and other bribes paid for by the Contributor Bank Defendants. For example, in the conversation below, Hayes agreed to buy lunch for the ICAP Yen desk if they participated in the manipulation of sixmonth Yen-LIBOR over the next two days:

October 24, 2006:

<u>ICAP [Read]</u>: let me know a little later what you need...i know you want 6's high tomorrow

<u>UBS [Hayes]</u>: well today and tomorrow then i can breath a little! 2morrow fix is huge 400b [400 billion yen]

<u>ICAP [Read]</u>: i know you told me...ok as long as futs don't get outdone by any libor moves south?

<u>UBS [Hayes]</u>: ...libors going up saved me on day look like i was going to lose 50m jpy [50 million Yen] on futs vs libs

ICAP [Read]: ouch!

<u>UBS [Hayes]</u>: but then 6m went up a bp and i was saved well almost

ICAP [Read]: a50 curry was cheap then :-D

<u>UBS [Hayes]</u>: seriously mate whatever it takes bill me! ¹⁷⁴

430. Relaying the message to Goodman, Read emphasized the importance of the request and instructed the ICAP cash broker to get his "curry order ready":

October 24, 2006:

<u>ICAP [Read]</u>: Realise it might be getting harder but need 6m kept as high as possible...tomorrow I have a massive fix, today just large!! Ta mate Get your curry order ready will send [Ryan Sherer] round tomorrow.

<u>ICAP [Goodman]</u>: How high...above 552?

<u>ICAP [Read]</u>: If you can get them up there and keep them there tomorrow reckon the trader from ubs Tokyo will come over and buy you a curry himself!¹⁷⁵

431. UBS also sent ICAP brokers bottles of champagne to reward them for manipulative conduct:

December 7, 2007:

<u>ICAP [Read]</u>: Hi [Colin Goodman], Thanks again for all your efforts...Can you do your best to drive these libors higher, especially 3 mos if you can and it is still well bid...UBS had to stagger their move up but will definitely be in the count today... p.s. Bubbly on its way with [Hayes].¹⁷⁶

¹⁷⁴ Ex. C-1 at 12.

¹⁷⁵ *Id*. at 13.

¹⁷⁶ *Id*.

432. Hayes even promised to buy ICAP cash broker Colin Goodman a Ferrari if he could keep three-month and six-month Yen-LIBOR at the desired level:

February 29, 2008:

<u>ICAP [Read]</u>: If u can pls move 3m up more than 6m wud be much appreciated :-P

<u>ICAP [Goodman]</u>: What happens if they go down. 3m looked higher yester pm and 6m no change

<u>ICAP [Read]</u>: Make 6m go lower! They r going up. **[Hayes] will buy you a** ferrari next year if you move 3m up and no change 6m

ICAP [Goodman]: Not bad isuppose 9625 against 01625. 177

3. "Wash" Trades to Generate Illegitimate Commissions

- 433. In his SFO interviews, Hayes described using two types of sham transactions to compensate R.P. Martin and Tullett Prebon for their assistance in manipulating Yen-LIBOR and/or Euroyen TIBOR: (1) "wash trades" also known as a "flat switch" where Hayes and another counterparty exchanged financial instruments with the same notional value, at the same price; and (2) "switch trades" where the notional amounts would be identical but the prices would be slightly different, such that the party facilitating the trade (*i.e.* opposite Hayes) would be paid a little bit more in exchange for agreeing to assist with the sham transaction to compensate one of the Broker Defendants. During the Class Period, wash trades and switch trades accounted for a substantial part of R.P. Martin's and Tullett Prebon's Yen-desk revenue, reaching 38% and 35% of the total commissions UBS paid to these brokers in 2009, respectively.
- 434. While these trades resulted in a financial nullity for the counterparties, they generated significant illegitimate commissions for the Broker Defendants, in particular Broker Defendant R.P. Martin, who brokered both sides of the wash trades. At R.P. Martin, the entire

¹⁷⁷ *Id*.

Yen Desk shared commissions, giving other R.P. Martin Yen brokers incentives to assist in Hayes' manipulative schemes. For example, due to the large number of commissions generated from wash trades, UBS was R.P. Martin's Yen Desk's second-largest client during 2008 and 2009, accounting for nearly 9% of the R.P. Martin Yen desk's revenue.

435. According to Hayes' SFO interviews, wash trades and switch trades started out closely linked to a Broker Defendant's assistance in manipulating Yen-LIBOR and/or Euroyen TIBOR. For example, Hayes said that he would be more inclined to make sure he paid the Broker Defendants to reflect the additional value that he perceived UBS or its Euroyen-based derivatives trading desk was getting from a Broker Defendant's ability to help manipulate Yen-LIBOR and Euroyen TIBOR. For example, below is the first known manipulative conversation between Hayes and Noel Cryan at Broker Defendant Tullett Prebon in which Hayes explained the use of wash trades and switch trades as compensation:

February 9, 2009:

<u>UBS [Hayes]</u>: Do you know your cash desk, i.e. the guy who covers yen on your cash desk?

Tullett Prebon [Cryan]: Yes, mate I do.

<u>UBS [Hayes]</u>: Right. From now on I need you to ask him a favour on the fixes. I will make sure it comes back to you. I already do it with ICAP. Basically can you ask him to broker 3M cash, i.e. LIBOR lower for me today? I will look after you off the back of it. I do that for RP Martins too. So emphasize the importance to you. Just suggest it look a little softer to his accounts.

<u>Tullett Prebon [Cryan]</u>: OK, mate, I understand. I will go and speak to him.

<u>UBS [Hayes]</u>: Stuff like that, thanks, mate, is very important to me today.

Tullett Prebon [Cryan]: Just spoke to them, they're on the case ¹⁷⁸

¹⁷⁸ *Id.* at 29, 40.

<u>Hayes</u>: Ok much appreciated. If we do this going forwards it will come back to you in spades. Did you emphasise the importance?

Tullett Prebon [Noel Cryan]: I did

<u>Hayes</u>: ta. Like I said what normally do is if I get help on the LIBORS over the month I normally do at the end of the month I normally do a couple of like in and outs

<u>Tullett Prebon [Noel Cryan]</u>: That's good because Neil [Danziger at RBS] wants to pay for his trip to Vegas already, so he's been asking us about them already. Yeah so I'll be in touch over the month

- 436. Hayes further explained in his SFO interview that he used wash trades and switch trades as a monthly payment to the Broker Defendants. The recurring nature of these payments was in part to foster loyalty between Hayes and the Broker Defendants but also to keep the brokers motivated. Hayes recognized that he needed to incentivize and reward the Broker Defendants for their continued participation in the conspiracy.
- 437. R.P. Martin broker Terry Farr handled at least nine wash trades between September 2008 and August 2009 on Hayes' behalf. These trades alone generated more than \$412,000 in illegitimate commission revenue for the R.P. Martin Yen desk. Accordingly, Farr solicited the assistance of multiple members of the Yen desk, who found counterparties for the wash trades and telephoned additional Yen-LIBOR submitters to ensure their Yen-LIBOR submissions were consistent with Hayes' manipulative requests.
- 438. For example, on September 18, 2008, Hayes offered Terry Farr \$50,000 or \$100,000 or more in illicit commissions for R.P. Martin's assistance in the manipulation of sixmonth Yen-LIBOR:

if you keep 6s unchanged today I will do fucking one humongous deal with you ... Like a 50,000 buck deal whatever. I need you to keep it as low as possible ... I'll pay you, you know, 50,000 dollars, 100,000 dollars ... whatever you want. .. I'm a man of my word.

- 439. The next day, on September 19, 2008, Hayes used Farr to engage in a series of "wash" trades with several derivatives traders at other panel banks to generate the promised \$50,000 in commissions and fees for R.P. Martin. *See e.g.*, ¶¶ 462, 484, 508-510, *infra*.
- 440. Once the switch and wash trades became a regular practice, Broker Defendants would proactively line up these sham transactions with other co-conspirators. For example, according to Hayes, Noel Cryan asked him to enter into switch trades, and Hayes agreed and executed them. This was especially true near the end of the quarter, when extra commission would help a Broker Defendant hit their budget, resulting in larger bonuses for the individual brokers. As Hayes described his relationship with R.P. Martin, "[t]he whole desk, I mean like when it came to end of the quarter and they were short of hitting their budget you know, the whole desk knew the score. The whole desk, you know, like wanted Terr [Farr] to go in and try and do some big trades with me so that they, like hit budget and got their bonuses or whatever you know."
- 441. Counterparties for wash trades and switch trades were easy to find. Much like the Broker Defendants, who were willing to help Hayes and his co-conspirators manipulate Yen-LIBOR and Euroyen TIBOR in exchange for extra commission payments, traders at other Contributor Banks Defendants, including RBS and JPMorgan, were always willing to engage in sham transactions so long as they too were compensated. Compensation usually took two forms: (1) entertainment, *e.g.*, a trip to Las Vegas; and (2) "gift trades," *i.e.*, the best deal coming through the broker's desk, which would be given only to the broker's best customers.
- 442. One Euroyen-based derivatives trader in particular, Neil Danziger ("Danziger") at Defendant RBS, was always happy to engage in wash trades or switch trades in exchange for free entertainment. As Hayes explained, brokers typically spent about 5% of their brokerage

revenue entertaining clients. Danziger, who preferred to put his wash trades through Tullett Prebon, knew that the more commission he generated for Tullett Prebon, the more they would be willing to spend entertaining him. Because RBS' money was used to pay the excess commissions, it was a win-win for Danziger and Hayes, who benefited not only from the positive impact their manipulative conduct had on their respective trading books, but also from whatever kickbacks the Broker Defendants threw their way for paying excess commission.

443. Hayes' superiors were aware of and expressly approved his use of wash trades and switch trades to compensate the Broker Defendants for their assistance in manipulating Yen-LIBOR and Euroyen TIBOR. Hayes explained in his SFO interview that after his first switch trade with R.P. Martin, he went to his direct boss, Michael Pieri, to discuss what had happened. Pieri was fine with this conduct. In a follow-up conversation, Hayes explained "[i]t was clear to me and to Mike that we were doing this for, like, for, well, what I would have almost said was legitimate reasons to try and make the bank more money...So if the bank was paying out brokerage it was getting it back in other ways."

4. UBS Paid a Special "Bonus" To Broker Defendant ICAP

444. UBS, and in particular, Hayes, were significant clients of the Broker Defendants. Hayes steered a considerable amount of business toward the Broker Defendants, resulting in substantial bonuses based on the amount of commissions his business generated for the Broker Defendants. For example, beginning in June 2007, UBS paid Broker Defendant ICAP a monthly fixed fee that averaged between 70,000 GBP and 85,000 GBP per month (US \$126,000 and US \$153,000) for brokerage services performed on behalf of Hayes. As a result, between April 2007 and March 2009, Hayes singlehandedly accounted for, on average, approximately fourteen percent of ICAP's Yen desk's business (although at times, he accounted for as much as twenty percent of ICAP's Yen desk's business), making him ICAP's Yen desk's biggest individual

client. UBS was ICAP's Yen desk's overall largest client from October 2006 through January 2011, accounting for, on average, approximately twenty-three percent of ICAP's Yen desk's revenue between April 2007 and March 2009 (although at times, it accounted for as much as thirty percent of the Desk's revenue).

- 445. In addition, Hayes acted as the counterparty to many transactions certain ICAP brokers facilitated, thus further increasing ICAP's Yen desk's commissions. The Yen desk earned a fixed fee from UBS, but also received commissions based on the notional value of the transactions from the counterparties to Hayes' trades. Because he brought significant business to the Yen desk, losing Hayes' business would have been, as stated by one ICAP Yen broker, "a significant loss."
- 446. In exchange for Colin Goodman's daily skewed Suggested LIBORs, UBS ensured that ICAP and Goodman were well compensated. Initially, as Hayes began making his requests in late 2006, Goodman agreed to skew his Suggested LIBORs for promises of an occasional champagne, lunch or dinner, such as "copious amounts of curry," or "bubbly." As time went on, Read, ICAP's Yen Desk Head Danny Wilkinson, and Hayes also rewarded Goodman with trades which UBS would intermediate, to pay him illicit commission. For example:

January 25, 2007:

<u>ICAP [Goodman]</u>: I hear through the vine you have a good month. Hows my bonus pot looking? Mlord libor

<u>ICAP [Wilkinson]</u>: will push one your way today

ICAP [Goodman]: Ok chief...thks And im pushing 6mos as low as I can!! 179

447. Goodman's demand for greater compensation in return for his skewed Suggested LIBORs quickly escalated. Goodman threatened to stop providing the "LIBOR services," as

¹⁷⁹ *Id*. at 21.

Hayes' requests became more persistent, unless he received better compensation. As the conversation below demonstrates, Wilkinson matter-of-factly called Goodman's demands requests for "kickbacks":

April 18, 2007:

<u>ICAP [Goodman]</u>: Hi [Danny] with ubs how much does he appreciate the yen libor scoop? It seems to me that he has all his glory etc and u guys get his support in other things. I get the drib and drabs. Life is tough enough over here without having to double guess the libors every morning and get zipper-de-do-da. **How about some form of performance bonus per quarter from your b bonus pool to me for the libor service...**

<u>ICAP [Wilkinson]</u>: Lord Baliff, I would suggest a lunch over gold week. Money or Tuesday if you are around...as for kickbacks est we can discuss that at lunch and I will speak to [Hayes] about it next time he comes up for a chat.¹⁸⁰

448. Wilkinson and Read pressed Hayes about paying more brokerage fees to fund an additional quarterly bonus for Goodman. As the quarter drew to an end, Wilkinson explained to Read in the email below that UBS had made "loads of money" as a result of ICAP's manipulative conduct and should consider the increased fee "a back payment for the money Colin has made Tom [Hayes] over the last 6 months":

June 7, 2007:

<u>ICAP [Wilkinson]</u>: ...if I can get them to pay what we are asking it will put enough money in the coffers to cover [Colin] with future bonus payments that I had to promise him and might cover some of the losses my desk incurred last month. If you could speak to [Tom] our of hours and hint that Colin had said he would stop giving the libor "flows" then maybe Tom could push Mike [Pieri, his supervisor at UBS] to make the payment, Tom said if it were down to him it would be paid as [Colin] makes him loads of money and i had to commit to paying lord bailiff [Goodman's nickname] a regular bonus because basically while you were off he said it was all over and he would not help anymore if there was not enough money in it for him, UBS can look at it as a back payment for the money Colin has made Tom over the last 6 months¹⁸¹

¹⁸⁰ Ex. C-1 at 21.

¹⁸¹ *Id.* at 22.

- 449. Hayes agreed, and as a result of Hayes' efforts within UBS to get recognition for Goodman's "LIBOR services," ICAP successfully re-negotiated its fixed fee contract with UBS in June 2007 to increase its monthly fixed fee by an additional £5,000 (approximately \$9,000). The ICAP Yen desk awarded this amount as a quarterly bonus to Goodman, and retained the rest as additional bonuses and compensation for the rest of the desk.
- 450. When the Yen-LIBOR fixing did not move in the direction he requested, Hayes threatened to take UBS' business away from ICAP. In response, Read and Wilkinson urgently pressed Goodman to modify his Suggested LIBORs. For example, on June 28, 2007, Goodman resisted sending a revised Suggested LIBORs reflecting Hayes' preferred six-month rate, after he had already distributed the day's run thru. Read and Wilkinson had the following exchange:

June 28, 2007:

ICAP [Read]: [Danny Wilkinson], THIS IS GETTING SERIOUS [HAYES] IS NOT HAPPY WITH THE WAY THINGS ARE PROGRESSING AND HE IS GOING TO HAVE A WORD WITH [Competing Broker] TO RECTIFY THE SITUATION. CAN YOU PLEASE GAT A HOLD OF [Colin Goodman] AND GET HIM TO SEND OUT 6 MOS LIBOR AT 0.865 AND TO GET HIS BANKS SETTING IT HIGH. THIS IS VERY IMPORTANT BECAUSE HE IS QUESTING MY (AND OUR) WORTH...GET 6MOS HIGH PLEASE

<u>ICAP [Wilkinson]</u>: mailed him spoke to him, **he realizes the carrot might go if this carries on**¹⁸²

- 451. Goodman eventually sent the demanded revised run thru with the six-month Suggested Yen-LIBOR at the level Hayes requested, 0.865.
- 452. Read and Wilkinson earned a considerable amount of money from Hayes' business (especially after factoring in illicit commissions from trades executed by Contributor Bank Defendants). For example, in 2010, Darrell Read was paid over £943,000 roughly two and a half times what he earned in 2008 in large part because of his involvement in the

¹⁸² *Id.* at 22-23.

conspiracy to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. ¹⁸³ Wilkinson fared even better, receiving a £955,070 bonus in 2009 – almost double what he earned in previous years – as a result of the Yen Desk's involvement in the Defendants' conspiracy. ¹⁸⁴

453. In early 2009, Hayes took his business elsewhere when he was not completely satisfied with ICAP's assistance in manipulating Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. At the end of 2008, ICAP broker Darrell Read retired for a brief period. Hayes then moved some of his business to R.P. Martin because he believed the broker there, Terry Farr, was more responsive to his requests to manipulate Yen-LIBOR. Upon Derivatives Read's return to ICAP in April 2009, Read restored the relationship with Hayes by ensuring that his Yen-LIBOR requests were transmitted to Colin Goodman on a regular basis:

April 28, 2009:

<u>UBS [Hayes]</u>: need 6m up big time when 6m goes over the turn

ICAP [Read]: ill get to work on [Colin]

UBS [Hayes]: thx

ICAP [Read]: ok with you, have you asked [Colin] for his opinion yet

<u>UBS [Hayes]</u>: no to be honest [Derivatives Broker 2] is too busy, he has too many lines...I rarely get [Colin's] insight I rely on [R.P. Martin broker Terry Farr] more now

<u>ICAP [Read]</u>: ok we can remedy that :-(I'll give them a kick in the arse and contact [Colin] direct

<u>UBS [Hayes]</u>: yeah we be better

¹⁸³ R. v. Read & Ors., Transcript of Trial at 19-23 (Nov. 17, 2015).

¹⁸⁴ R. v. Read & Ors., Transcript of Trial at 110 (Oct. 26, 2015).

- E. Rabobank Colluded with Broker Defendants ICAP and R.P. Martin to Manipulate Yen-LIBOR to Benefit Rabobank's Euroyen-Based Derivatives Positions.
- 454. Despite awareness of an investigation related to LIBOR, Rabobank continued to manipulate Yen-LIBOR to benefit its Euroyen-based derivatives positions. Rabobank now began to use the Broker Defendants to facilitate the manipulation.
- 455. On November 30, 2010, in the midst of the CFTC's investigation of Rabobank's U.S. Dollar LIBOR submission practices, Rabobank Senior Manager 2 instructed the Yen-LIBOR submitters at that time, Yen Trader-Submitter 3 and Yen Trader-Submitter 4, that it was improper to consider rate requests from traders when making Rabobank's LIBOR submissions and that the practice should stop. That same day, when Takayuki Yagami sent the daily Yen-LIBOR rates to be submitted, the Yen-LIBOR submitters refused to assist him. Reacting to the loss of his ability to influence the Yen-LIBOR fixings directly, the very next day Takayuki Yagami contacted Broker Defendant ICAP ("ICAP Cash Broker") and requested his assistance in manipulating Yen-LIBOR to benefit the Takayuki Yagami's Euroyen-based derivatives positions. Takayuki Yagami admitted to ICAP cash broker, Colin Goodman, that he previously acted as Rabobank's Yen-LIBOR submitter and "influence[d]" the LIBOR submissions until November 30, 2010.
- 456. Takayuki Yagami continued to request Colin Goodman's assistance in his manipulative efforts throughout the end of 2010 and into early 2011. For example, on December 1, 2010, Takayuki Yagami wanted three-month and six month Yen-LIBOR "down" on December 2. Colin Goodman readily acquiesced and promised to "work some magic" to lower three-month and six-month Yen-LIBOR.
- 457. On at least two occasions, Rabobank also communicated with another broker at Broker Defendant R.P. Martin and sought R.P. Martin's assistance in manipulating Yen-LIBOR.

For example, on one of these occasions, on January 19, 2011, Rabobank requested R.P. Martin's assistance in pushing the six-month Yen-LIBOR fixing in a favorable direction to benefit Rabobank's Euroyen-based derivatives positions.

1. Rabobank Colluded with Broker Defendant R.P. Martin to Aid UBS' Manipulation

- 458. The Rabobank "Senior Yen Trader-Submitter," Paul Robson, communicated with Broker Defendant R.P. Martin to discuss the Yen market generally and Yen-LIBOR fixings in particular. From at least May 2008 through at least September 2008, R.P. Martin asked Paul Robson at times to make particular Yen-LIBOR submissions, and on at least one occasion stated that the request was intended to benefit Hayes' Euroyen-based derivatives positions. During the same period, Paul Robson also informed R.P. Martin that he received requests for particular Yen-LIBOR submissions for certain tenors from Takayuki Yagami. On at least one occasion, Paul Robson indicated he would accommodate R.P. Martin's Yen-LIBOR request on Hayes' behalf, along with Takayuki Yagami's rate preference when making Rabobank's Yen-LIBOR submissions on that particular day.
- 459. The below example reveals "back scratching," *i.e.*, explicit agreements by coconspirators to submit artificial Yen-LIBOR rates to financially benefit other co-conspirators' Euroyen derivatives positions in return for the other co-conspirators' agreement to return the favor sometime in the future. On July 18, 2008, R.P. Martin reached out to Rabobank to ask where Rabobank planned on setting its one-month Yen-LIBOR that particular day. Paul Robson had not yet been told where to set Rabobank's one-month Yen-LIBOR and R.P. Martin requested Rabobank set one-month Yen-LIBOR at "65" or "as low as possible basically" at the behest of a "geezer at UBS [Tom Hayes]." Paul Robson agreed and went further by saying that Rabobank would set its one-month Yen-LIBOR at .63 so long as R.P. Martin let UBS know in

order for UBS to "scratch [Rabobank's] back" in the future. R.P. Martin promised to "definitely" let UBS know in order to "play by the rules." Consistent with his agreement to do so, Rabobank's one-month Yen-LIBOR submission on July 18, 2008 was .63.

F. <u>RBS Manipulated Yen-LIBOR through Brokers and Engaged in Wash Trades</u> to Compensate the Broker Defendants for Their Assistance.

- 460. By January 2007, "RBS Yen Trader 1," Neil Danziger, came to suspect that UBS was using inter-dealer brokers to manipulate Yen-LIBOR. At that time, Danziger commented to another RBS trader, stating: "do you think brokers go and tell small banks where it should be? [...] on behalf of the bigger banks i could imagine UBS telling the brokers to go and get all the small banks to mark libor up." Several months later, in August 2007, Danziger commented again to Senior Yen Trader, Jimmy Tan, about information he learned from "R.P. Martin Broker B," Lee Aaron: "i was out with [Lee] yesterday every day [UBS Yen Trader Tom Hayes] comes down and asks the jpy desk to tell all the banks to set [Yen] libor low."
- 461. Beginning a year later, from September 2008 to August 2009, as requested by at least two Broker Defendants, R.P. Martin and Tullett Prebon, Neil Danziger agreed to execute wash trades with UBS to generate additional illicit commission in recognition for their assistance in helping Hayes manipulate Yen-LIBOR. *See* ¶¶ 433-443, 479-483, 523-530.
- 462. RBS paid brokerage commissions on some of these wash trades to maintain good relationships with the inter-dealer brokers. For example, on September 19, 2008, Lee Aaron asked Danziger for a "favour" to enter into a "switch" or wash trade with UBS because UBS wanted to pay R.P. Martin some illicit commission. In exchange for entering such a large wash trade with UBS, R.P. Martin promised to send around lunch to the RBS desk because the trade was so large. The exchange between Aaron and Danziger shown below:

September 19, 2008:

R.P. Martin [Aaron]: can you do me a favour ... you're not going to get paid any bro for this and we'll send you lunch around for the whole desk. Can you flat ... can you switch two years semi at 5 3/4, 100 yards [meaning 100 billion] ... between UBS. Just get ... take it from UBS, give it back to UBS. He wants to pay some bro. We won't bro you ...

RBS [Danziger]: Yeah, yeah.[...]

R.P. Martin [Aaron]: Yeah. Yeah. 100 yards ... actually can you make it 150 and I'll send lunch around for everybody?

RBS [Danziger]: Yeah.

<u>R.P. Martin [Aaron]</u>: Thanks very much. Cheers. Cheers, mate and you choose lunch.

463. That same day, R.P. Martin also asked Danziger to enter an additional ¥100 billion in wash trades with UBS so that Hayes could pay approximately \$31,000 in brokerage fees to R.P. Martin as compensation for R.P. Martin's assistance with the manipulation of Yen-LIBOR. By agreeing to do so, Danziger knowingly assisted Hayes' manipulation because he helped ensure that the inter-dealer broker was compensated.

464. Danziger also eventually asked R.P. Martin, on at least one occasion, to influence other panel banks' Yen-LIBOR submissions to benefit his Euroyen-based derivatives positions. For example, on June 26, 2009, Danziger asked R.P. Martin to assist in lowering six-month Yen-LIBOR. Aaron readily agreed saying "alright....we'll work on it":

June 26, 2009:

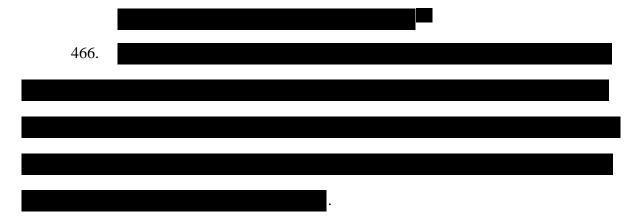
RBS [Danziger]: Has Tom [Hayes] been asking to get LIBORs up today?

R.P. Martin [Aaron]: Sorry start again. Say that again?

RBS [Danziger]: Has Tom been asking you to put LIBORs up today?

<u>R.P. Martin [Aaron]</u>: [Talking in background to Terry Farr] Er Tel, what's Tom want LIBORs today? Has he said anything about LIBOR, what way he want

them? Did you hear that? RBS [Danziger]: No R.P. Martin [Aaron]: Well he wants ones and threes a bit lower and sixes probably about the same, where they are now. He wants them to stay the same. RBS [Danziger]: I want them lower R.P. Martin [Aaron]: You want them lower? Sixes? RBS [Danziger]: Yeah R.P. Martin [Aaron]: Alright well. Alright well we'll work on it. 465.



G. <u>Deutsche Bank Used Inter-dealer Brokers to Manipulate Yen-LIBOR, Euroyen</u> TIBOR, and the Prices of Euroyen-based Derivatives

- 467. Deutsche Bank colluded with multiple Broker Defendants to disseminate false market information to the Euroyen market to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. For example, on July 10, 2009, Submitter-7 messaged inter-dealer Broker A-1, requesting that Broker A-1 get his Yen-LIBOR Contributor Bank clients to lower three-month Yen-LIBOR. Submitter-7 stated, "3 mth libor today? . . . any chance to get it lower or some resistance" Broker A-1 replied, "ill try prob Monday can get it lower."
- 468. Deutsche Bank also colluded with inter-dealer Broker B, R.P. Martin. For example, on September 26, 2008, Deutsche Bank and R.P. Martin manipulated Yen-LIBOR artificially higher: Guillaume Adolph messaged Terry Farr ("Broker B-1") in an electronic chat, "Morning libor to the roof today please," to which Broker B-1 replied, "yeah looks that way dude."
 - H. The Hayes Trial, Broker Trial, and Settlement Cooperation Produced to
 Plaintiffs by R.P. Martin Provided New Information Regarding the Scope and
 Inner-Workings of the Contributor Bank Defendants' and Broker Defendants'
 Conspiracy
- 469. The Hayes Trial, *R. v. Hayes*, began in the Southwark Crown Court on May 26, 2015, and concluded on August 3, 2015. Hayes was found guilty of all eight charges of

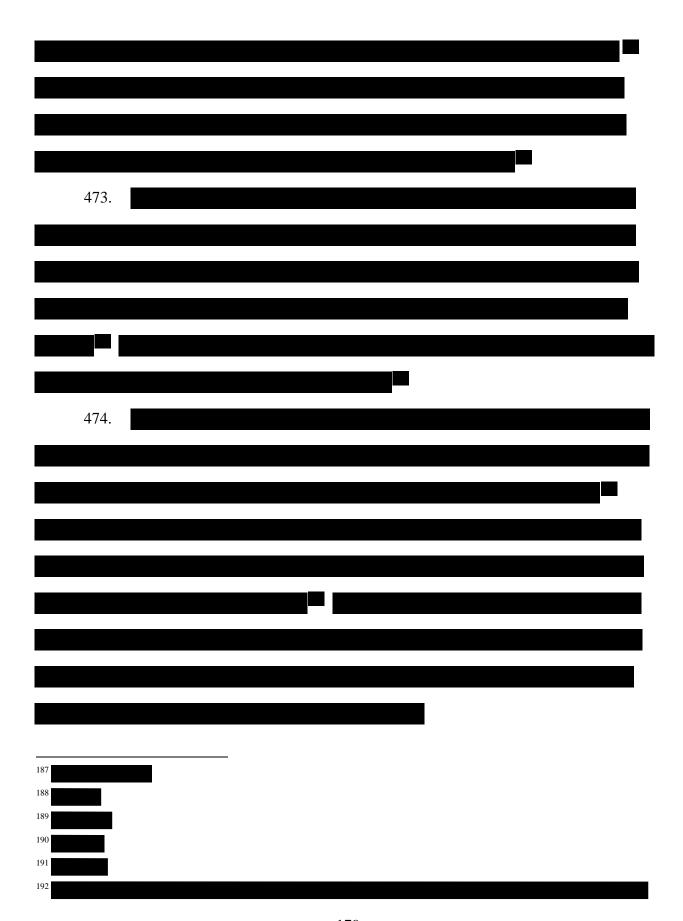
conspiracy to defraud. The trial focused on Hayes' manipulation of Yen-LIBOR and Euroyen TIBOR. The eleven-week trial included hundreds of trial exhibits and testimony from nine witnesses. A key feature of the trial was Hayes' testimony from 82 hours of recorded interviews that he gave to the SFO. This testimony was not available to Plaintiffs (or the public) prior to Hayes' trial. In addition, hundreds of new communications beyond those released in connection with the Defendants' government settlements were first made available to Plaintiffs at the Hayes Trial.

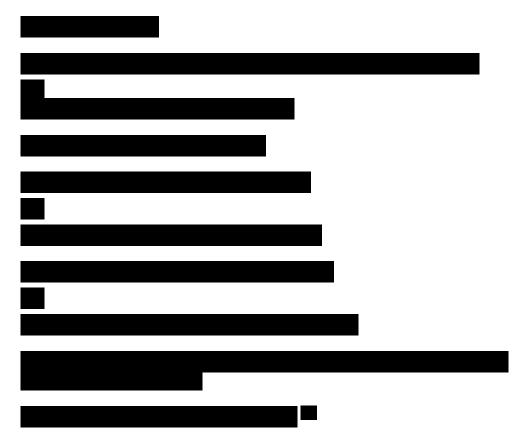
- 470. New evidence has also been revealed in the ongoing U.K. criminal trial of six inter-dealer brokers, *R. v. Read & Ors.* ("Broker Trial"). The Broker Trial focuses on the manipulative conduct of six brokers employed by the Broker Defendants, Darrell Read (ICAP), Colin Goodman (ICAP); Danny Wilkinson (ICAP), Terry Farr (R.P. Martin), James Gilmour (R.P. Martin), and Noel Cryan (Tullett Prebon) and their conspiratorial manipulation of Yen-LIBOR and Euroyen TIBOR with the Contributor Bank Defendants during the Class Period. 186
- 471. These trials, in addition to the documents produced to Plaintiffs by R.P. Martin as settlement cooperation, have confirmed the factual findings of multiple government regulators and expanded on the extent and nature of Defendants' conspiracy, including, the Broker Defendants' role in conspiring with multiple Contributor Bank Defendants to manipulate Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives.

a. R.P. Martin

472.

¹⁸⁶ Lindsay Fortado, *First Brokers Stand Trial Over LIBOR*, Financial Times (Oct. 4, 2015), http://www.ft.com/intl/cms/s/0/9295add8-6929-11e5-97d0-1456a776a4f5.html#axzz3t0kTtnXE.





475. Hayes knew that Farr had relationships with Euroyen-based derivatives traders and Yen-LIBOR submitters at multiple banks. During his SFO interview, Hayes explained that Farr was valuable to him because he "knew people in the cash market", *i.e.*, the market for Euroyen deposits underlying both Yen-LIBOR and Euroyen TIBOR:

Terry was someone who would try and get me the best deals . . . as they came across the desk, which was useful for me. And he was also somebody, who was able to give me information because Terry had moved from the Forward desk, from the Cash desk to the Forward desk. So obviously what was happening in the Cash Market was of vital importance to me, so having someone who understood the cash market knew people in the cash market [was valuable]

476.



477. As explained below, multiple Contributor Panel Banks used R.P. Martin brokers as a conduit to conspire with each other and manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives throughout the Class Period.

i. HSBC

478. HSBC frequently conspired with UBS through R.P. Martin's Terry Farr to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives during the Class Period. HSBC's Yen-LIBOR submitter, Luke Madden, conspired to make false Yen-LIBOR submissions with multiple Contributor Bank Defendants through his good friend and

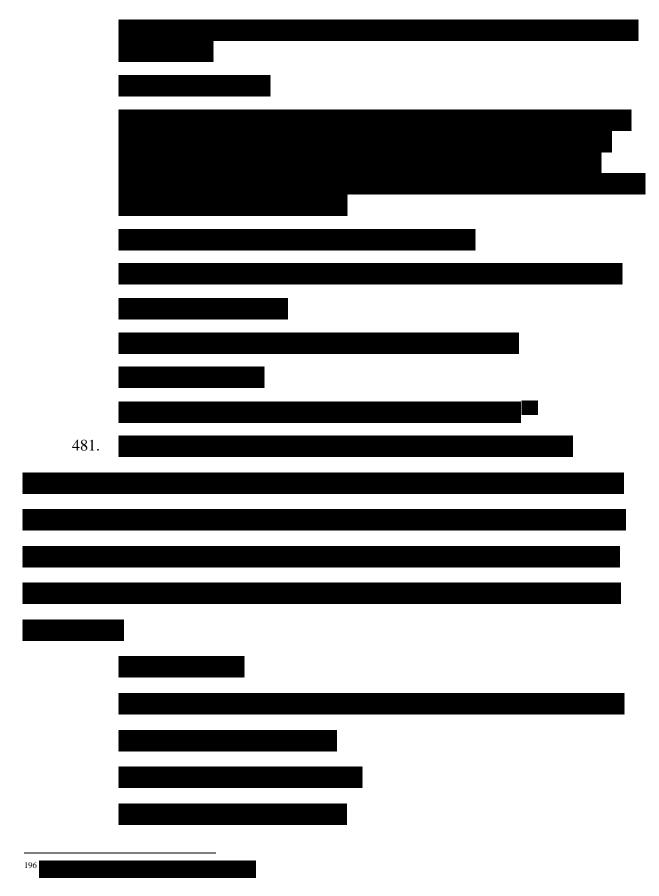
¹⁹⁴ .

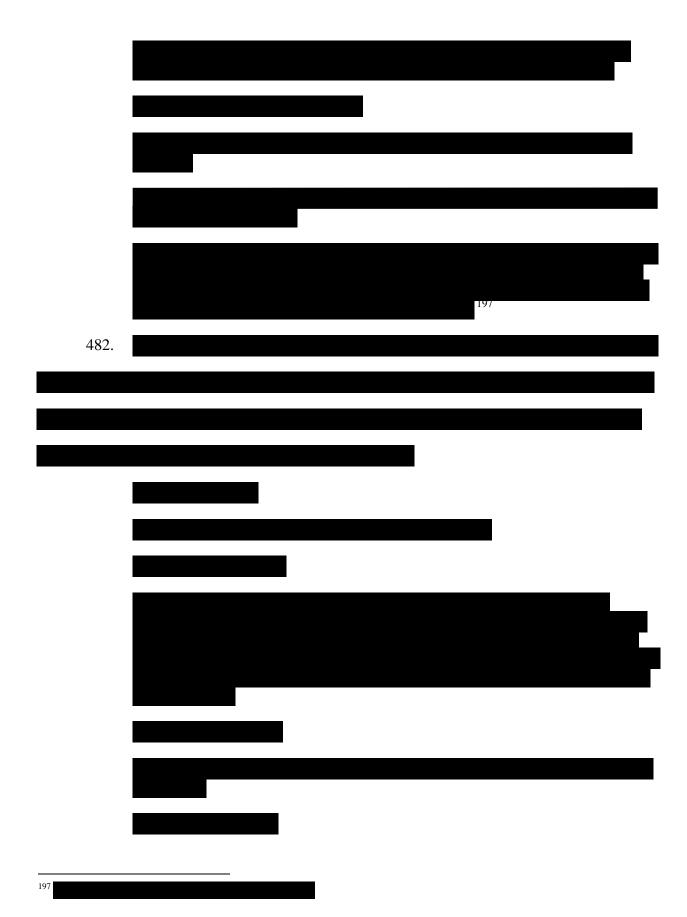
R.P. Martin broker Terry Farr. Through Farr, HSBC participated in multiple manipulative campaigns with UBS and other Contributor Bank Defendants, coordinating false Yen-LIBOR submissions among a large group of panel banks. Many of these campaigns were successful at manipulating Yen-LIBOR rate and the prices of Euroyen-based derivatives. *See* ¶¶ 605-633, *infra*.

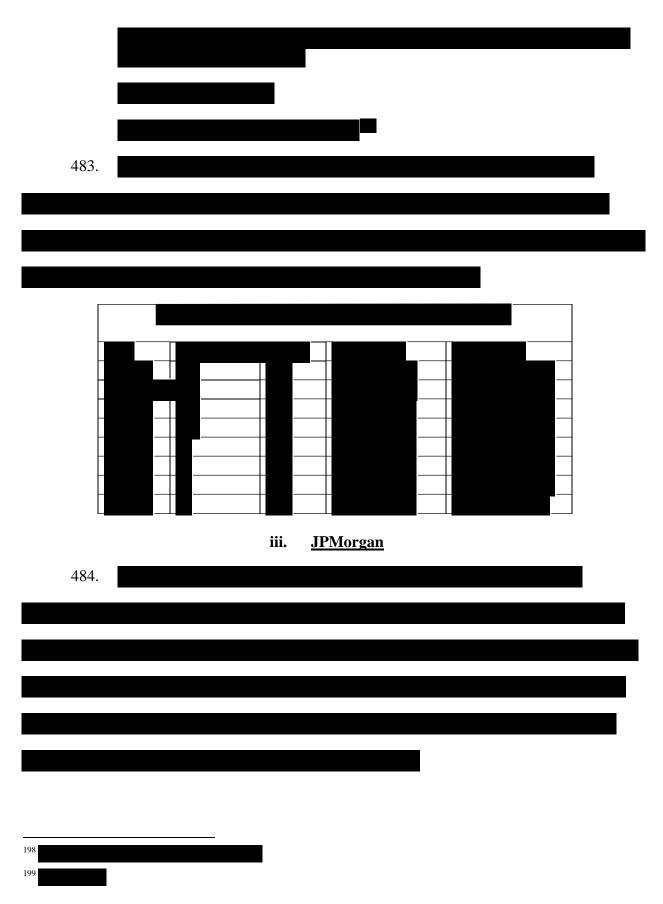
ii. RBS

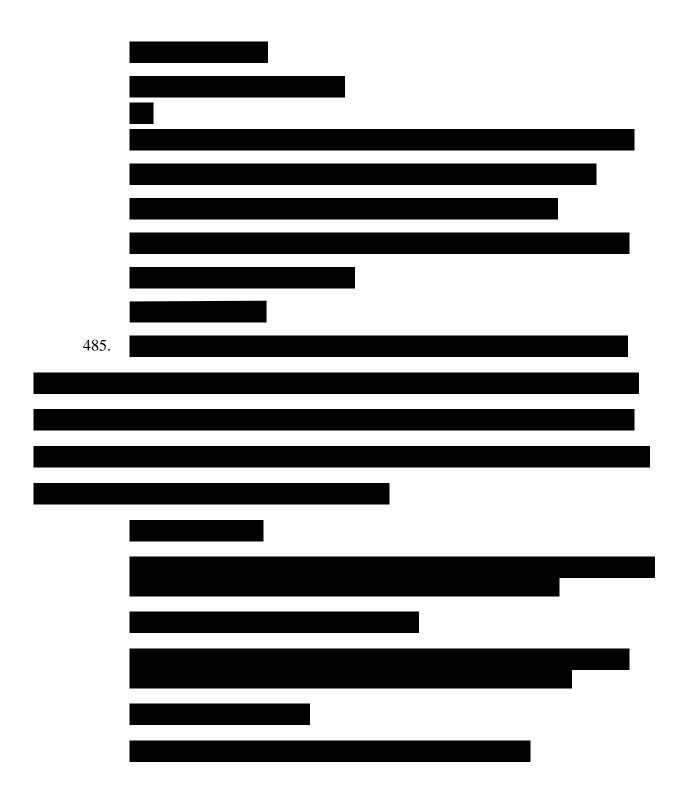
479. RBS conspired with UBS through R.P. Martin brokers Lee Aaron and Terry Farr during the Class Period to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. RBS Euroyen-based derivatives trader Neil Danziger coordinated false Yen-LIBOR submissions with Hayes and traders at multiple Contributor Panel Defendants. *See* ¶ 465, *supra*. Danziger also executed wash trades in furtherance of Defendants' conspiracy to pay the brokers illicit commission as a reward for manipulating Yen-LIBOR and/or Euroyen TIBOR and the prices of Euroyen-based derivatives.

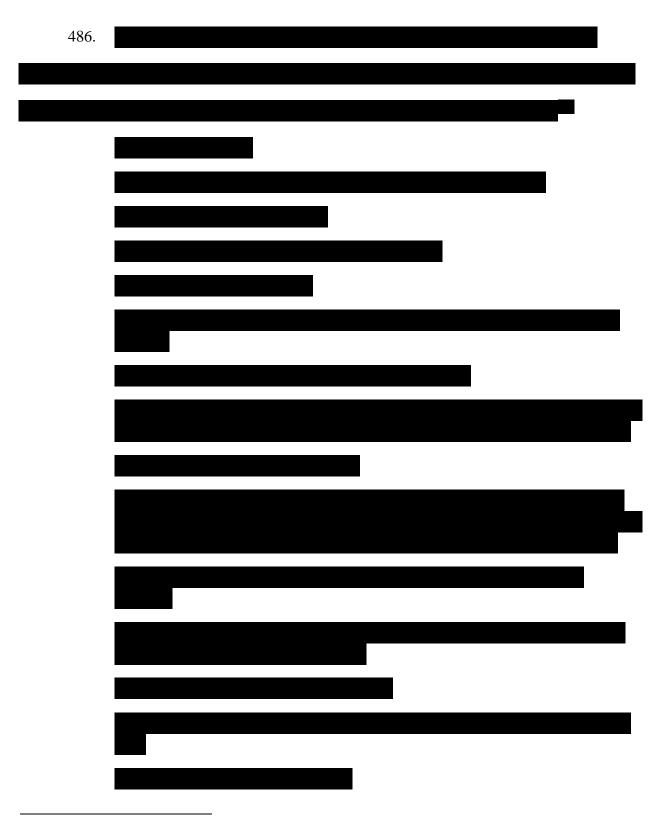




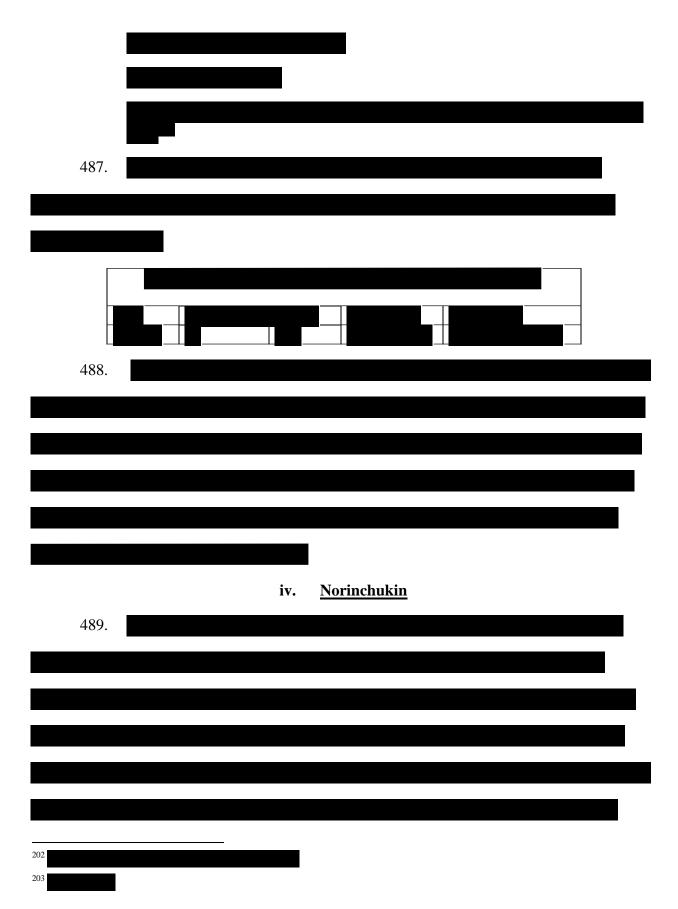


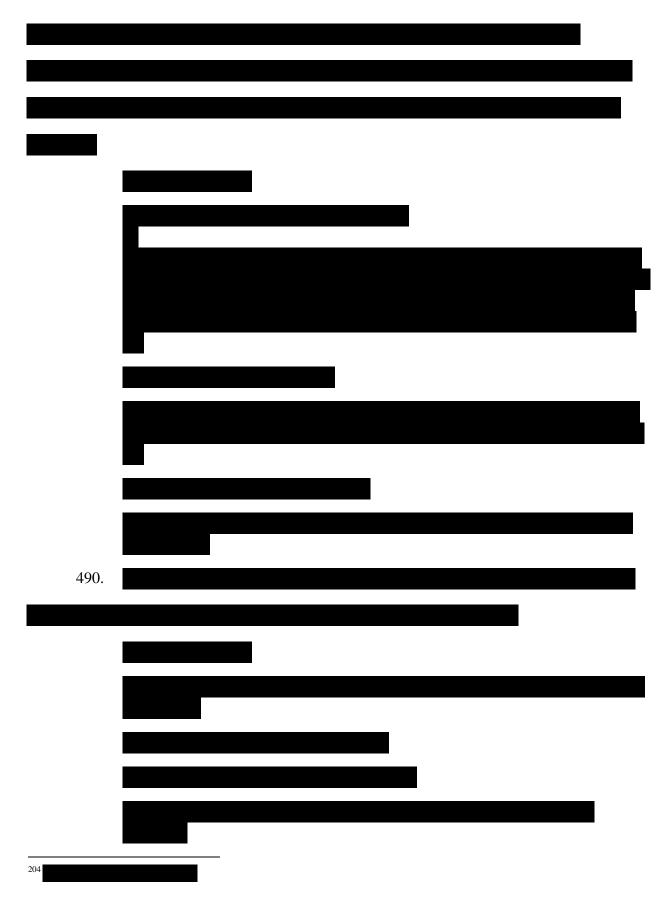


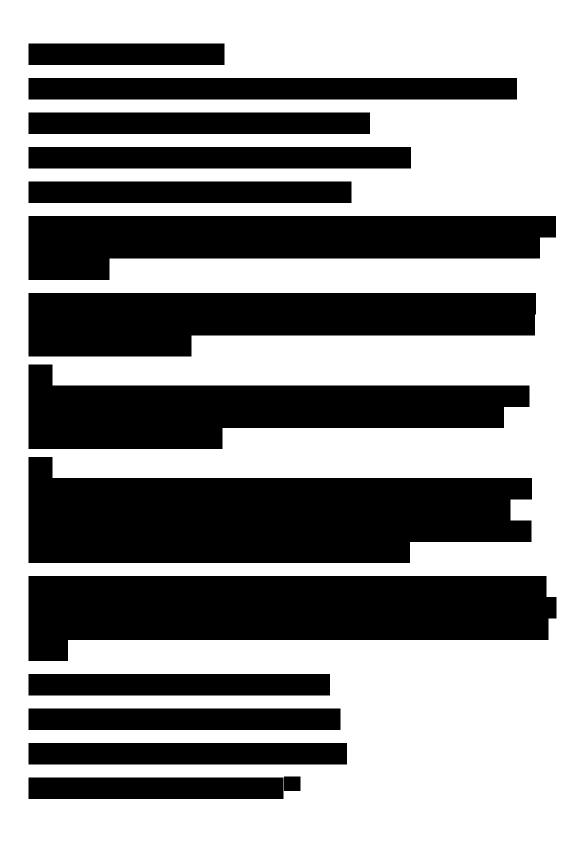


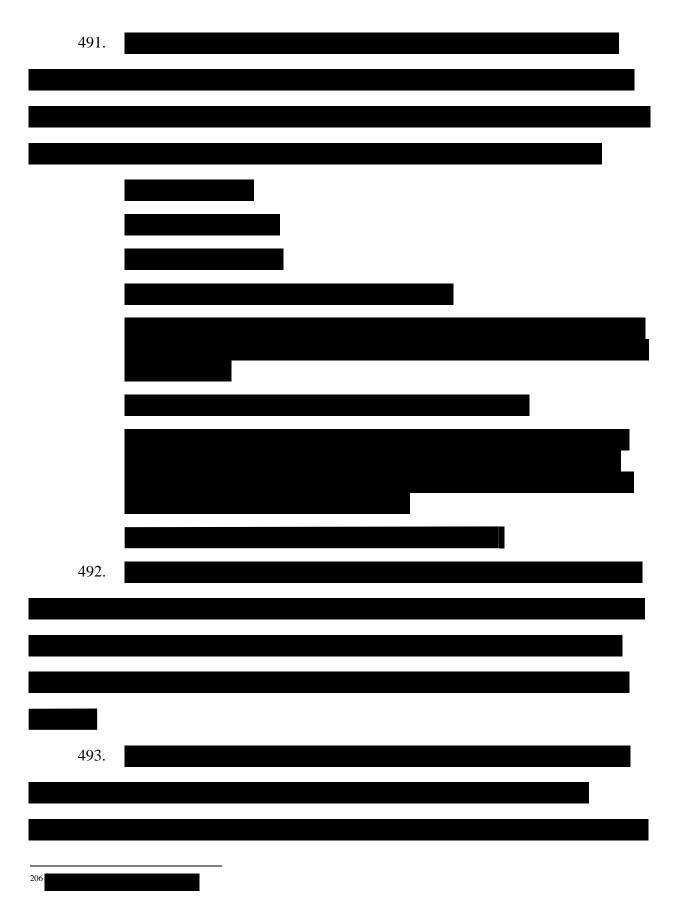


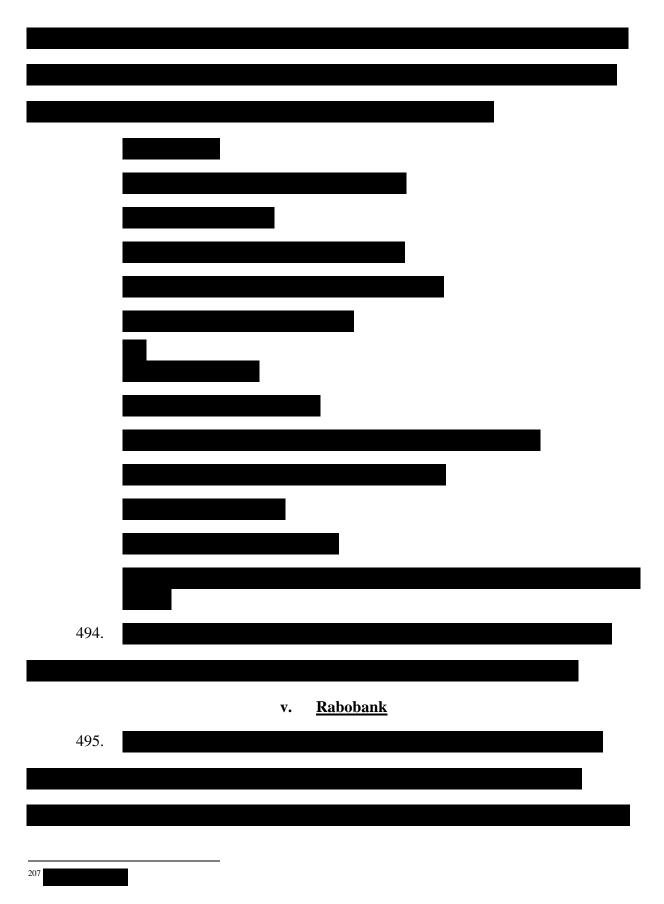
²⁰¹ Tullett Prebon broker Noel Cryan explained to the SFO that it was common to stagger when wash trades were entered to make it look as though there was a legitimate reason for entering and exiting the position, providing the traders involved with a story they could use when questioned about the sham transactions. *R. v. Read & Ors* Transcript of Trial at 25:14-25 (Nov. 12, 2015).

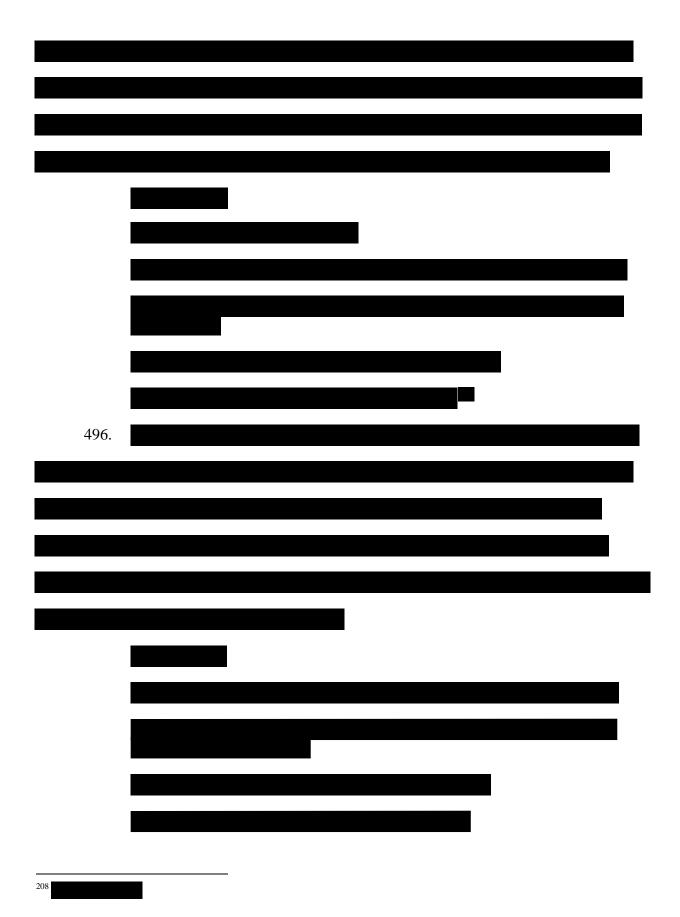


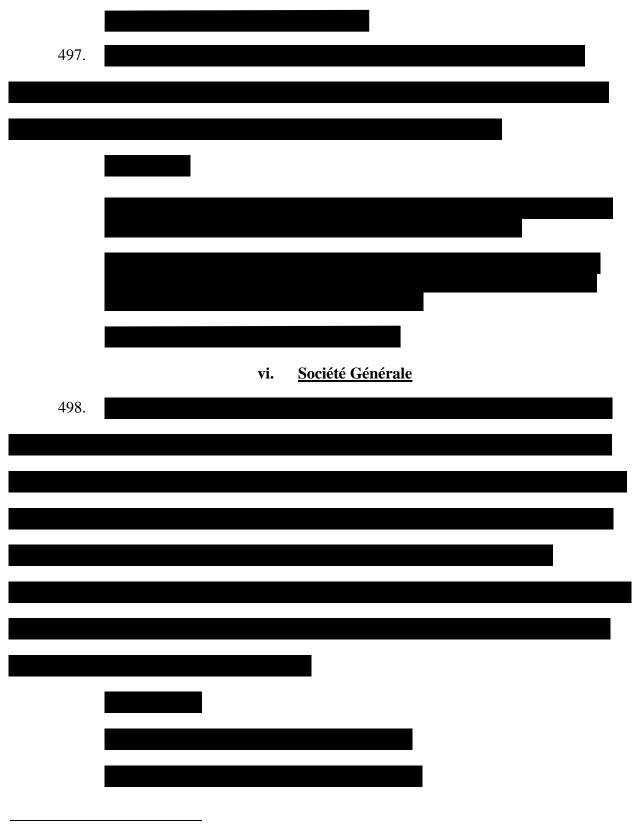






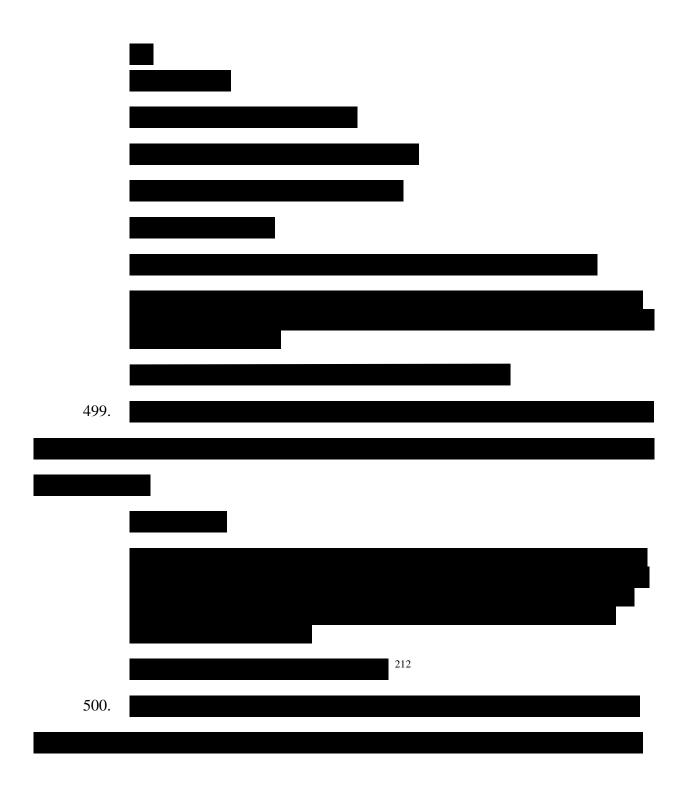


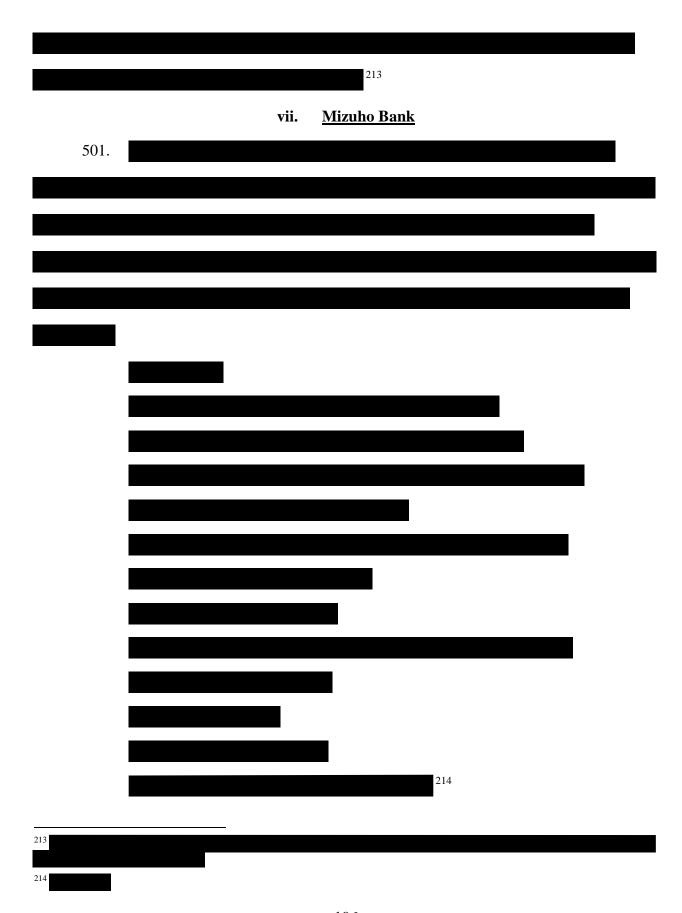


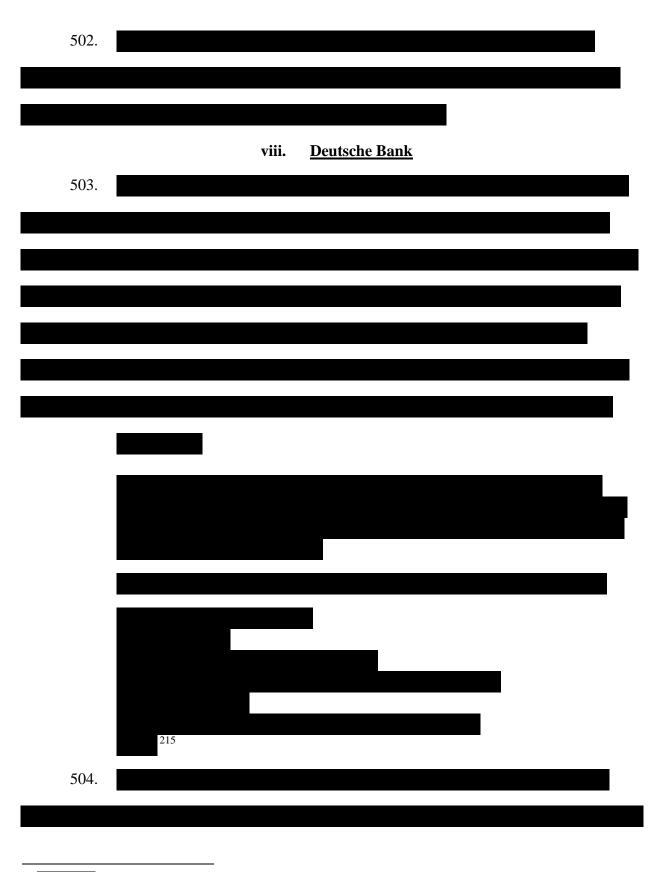


²⁰⁹ *Id.* at 3.

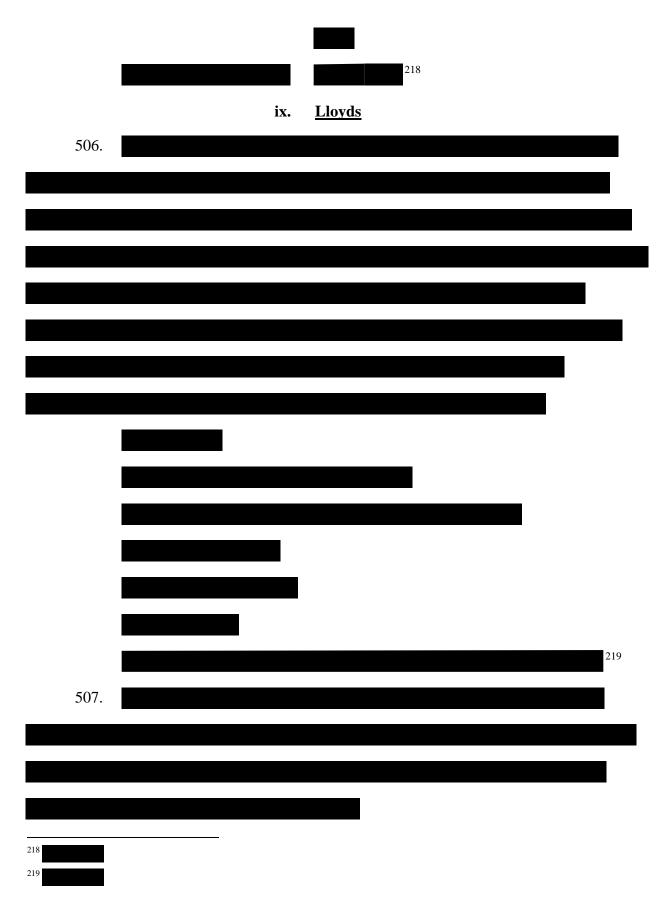
²¹⁰ *Id*. at 23.



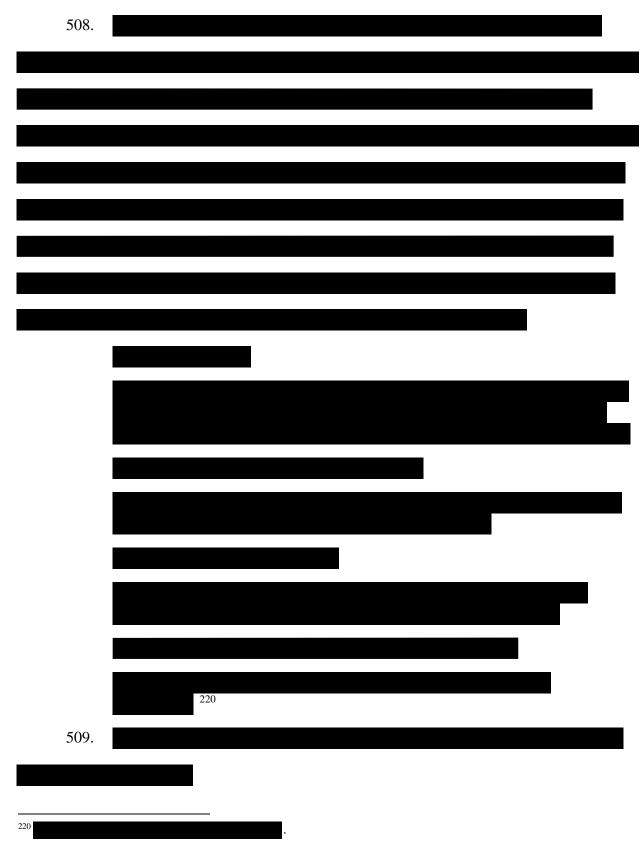


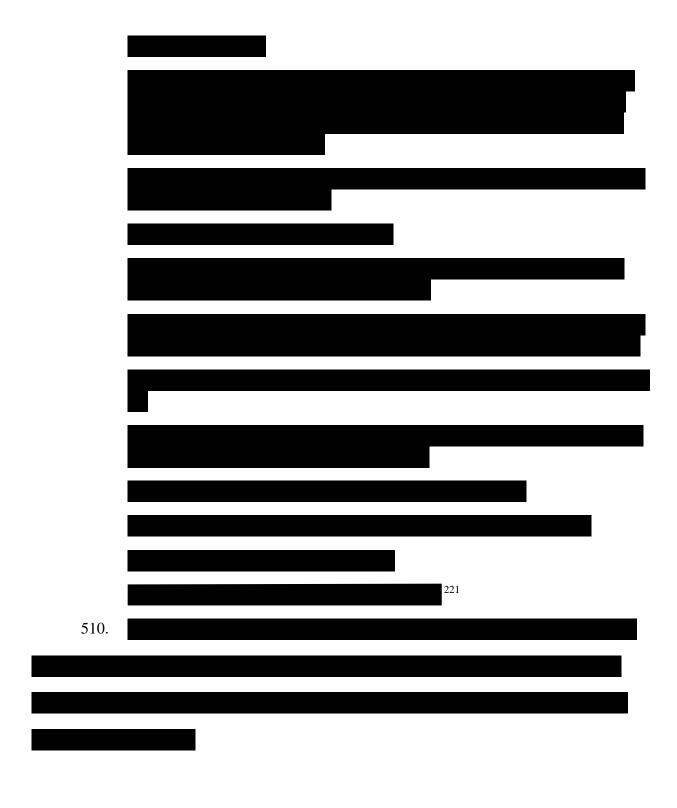


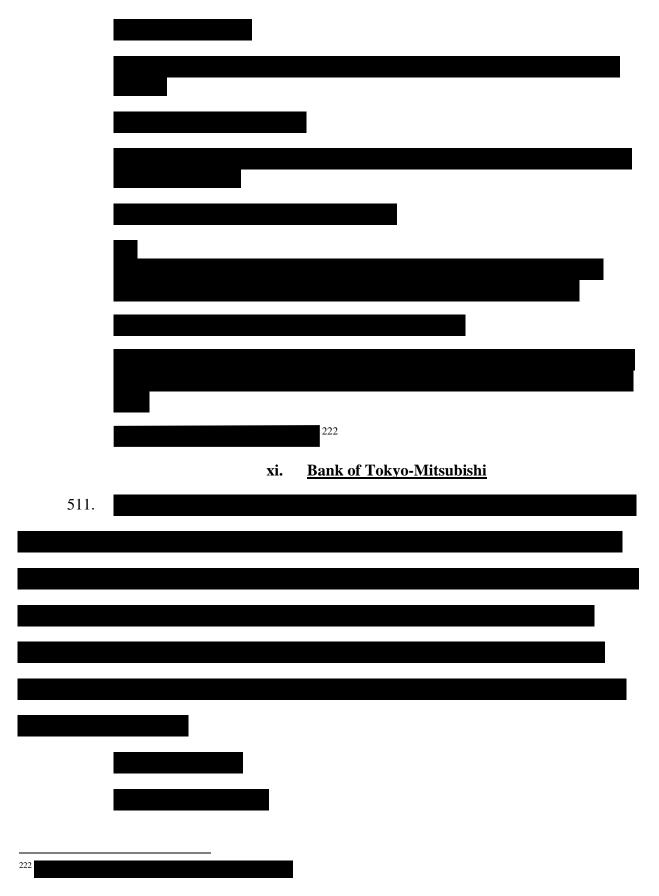


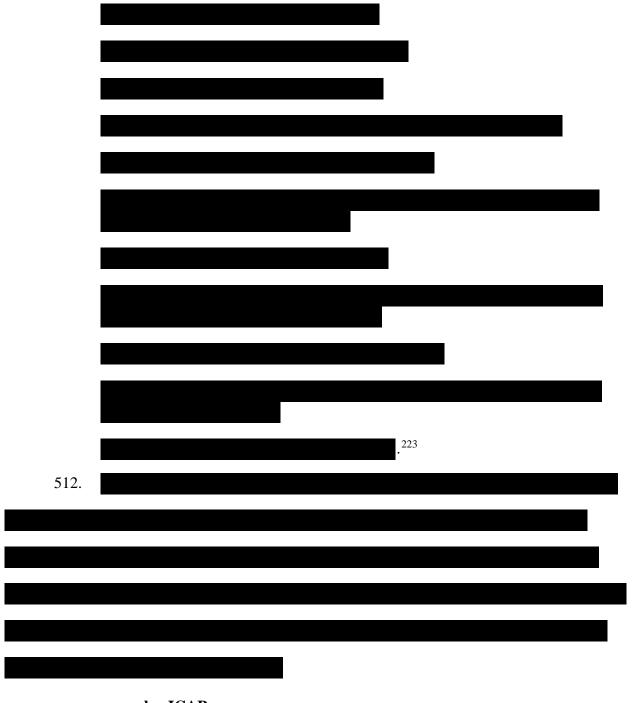












b. ICAP

513. ICAP also served as a conduit between multiple Contributor Bank Defendants to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives during the Class Period using many means, including (1) disseminating false "run thrus"; and (2)

²²³

coordinating false Yen-LIBOR submissions among Contributor Panel Banks. For example, in the message below, Read notified UBS trader Tom Hayes that he had been in contact with West LB ("Bank A") and received confirmation that they would make an artificially lower Yen-LIBOR submissions on December 6, 2006:

December 6, 2006:

ICAP [Read]: i have spoken to [Bank A] about libors, he will be the lowest²²⁴

514. To maximize their impact on Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives, ICAP brokers worked as a team to leverage all their contacts when making requests for false Yen-LIBOR submissions. For example, in the conversation below, Hayes asked Read to contact Lloyds' and Rabobank's Yen-LIBOR submitters to request higher six-month Yen-LIBOR submissions:

October 31, 2006:

UBS [Hayes]: hi do you speak to rabo or lollyds? have their 6m libors very very low thx for getting it up y/day

ICAP [Read]: cash boys talk to lloyds but their guy has been away, will chase them today no contact with rabo cash

UBS [Hayes]: ok they have probably just left the libors alone whilst he is away!

ICAP [Read]: they will be wiped off the bottom anyway

<u>UBS [Hayes]</u>: yes evry little helps

ICAP [Read]: :-)²²⁵

Following the discussion with Hayes above, Read passed the request for an artificially high six-month Yen-LIBOR submission to ICAP "Cash Broker 1," Colin Goodman,

whom he knew was in contact with Lloyds' Yen-LIBOR submitter:

515.

²²⁴ Ex. C-1 at 16.

²²⁵ Ex. C-1 at 15.

October 31, 2006:

<u>ICAP [Read]</u>: Morning [Colin], Still need these libors kept as high as possible please mate. ... anything you can do to get them high will be much appreciated.

516. ICAP brokers often conspired with and coordinated false Yen-LIBOR submissions among multiple Contributor Bank Defendants. For example, in the conversation below, Read asked "ICAP Derivatives Broker 3" David James Smith to contact RBS' back up Yen-LIBOR submitter, Neil Danziger, ²²⁶ to coordinate a high six-month Yen-LIBOR submission among at least three Contributor Bank Defendants – UBS, RBS and JPMorgan:

August 23, 2007:

<u>ICAP [Read]</u>: [David] does [Neil Danziger] have any influence over their libor sets...if he does ask him to do us a favor and edge 6m up please...think [JPMorgan trader Paul Glands] was chasing [Colin] for a high fix as well, so should do us all a favour...thanks

<u>ICAP [Smith]</u>: [Neil Danziger] is doing them this wek, he wants 6's up so will be marking them up anyway

<u>ICAP [Read]</u>: brooliant!! They are making fortunes with these high fixings!!! :-) that's UBS, RBS, and [JPMorgan] + M'Lord should be ok!!²²⁷

517. ICAP cash broker Colin Goodman also communicated directly with traders and submitters he knew at panel banks to request false Yen-LIBOR submissions. For example, Goodman contacted Deutsche Bank's Yen-LIBOR submitter on multiple occasions, including after receiving instructions from Darrell Read to request a false Yen-LIBOR submission on Tom Hayes' behalf. For example, in the conversation below, Darrell Read asked ICAP "Junior Broker 1," Ryan Sherer, to ensure that Goodman would manipulate Yen-LIBOR lower during the next week:

²²⁶ Ex. B-4 at 7 (Neil Danziger was the backup Yen-LIBOR submitter).

²²⁷ Ex. C-1 at 16.

October 19, 2007:

<u>ICAP [Read]</u>: want 1m and 6m libors to keep pushing down...3m to hold as best we can (6m down the most important thing) ...same goes for next week, if you could just remind [Colin] each morning

ICAP [Sherer]: will do thks²²⁸

518. Following this request, Goodman contacted Deutsche Bank's Yen-LIBOR submitter the next week to request an artificially lower Yen-LIBOR submission.

519. ICAP also was aware that Hayes was conspiring with R.P. Martin and other brokers to manipulate Yen-LIBOR and Euroyen TIBOR. For example, in the conversation below, which was revealed during the Hayes Trial, Read and Hayes discussed the series of wash trades UBS entered with RBS and JPMorgan on September 19, 2008:

September 19, 2008:

ICAP [Read]: Did Stuart switch for you?

<u>UBS [Hayes]</u>: Yeah 50b 2y and Neil [Danziger] at RBS 150b...Sorry 200b...I owe him 150b more...Total 400b...thx advice

ICAP [Read]: Nice of them, 400bn on no cap is a lot of bro

UBS [Hayes]: will the only deal this month tho

<u>ICAP [Read]</u>: cheap deal for you if he can move libor by a quarter of a basis point on a big fix...works both bays :-)

UBS [Hayes]: He [Terry Farr] has a nice little niche there

c. Tullett Prebon

520. Tullett Prebon brokers were another means through which multiple Contributor Bank Defendants conspired to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives, including by coordinating false Yen-LIBOR submissions in furtherance of the conspiracy.

²²⁸ Id.

i. <u>Tullett Prebon Management Directed Brokers to</u> <u>Engage in More Wash Trades</u>

- 521. Tullett Prebon broker Noel Cryan described in his SFO interview how management directed Tullett Prebon brokers to solicit wash trades from their clients in order to boost profitability. Around September 2008, there were rumors circulating that R.P. Martin was generating approximately £100,000 per month in commission brokering trades for Yen off balance sheet products. After hearing of R.P. Martin's success, Tullett Prebon manager Angus Wink instructed brokers to start engaging in more wash trades to generate additional revenue. Brokers were more than willing to comply with Wink's directions. During the Class Period, Tullett Prebon brokers were paid roughly 33% of the commission they earned as a bonus each quarter. As a result, the more wash trades they could organize between clients, the more commission they earned and the larger their quarterly bonus.
- 522. Tullett Prebon brokers executed multiple wash trades in furtherance of the Defendants' conspiracy, including with RBS Euroyen-based derivatives trader Neil Danziger. Danziger was a client of Mark Jones, a broker on the Yen off balance sheet desk, who worked closely with Cryan. Jones knew that Danziger had a certain "lifestyle" and was eager to pay brokerage so he could earn free entertainment with RBS' money. Capitalizing on this, Jones routinely set up wash trades with Danziger to generate extra illicit commission.
- 523. Hayes was frequently the counterparty on the other side of these wash trades as well. To organize a wash trade, Jones typically relayed the request to Cryan who then asked Hayes to execute the trade. For example:

September 26, 2008:

<u>Tullett Prebon [Cryan]</u>: Neil Danziger has asked if you would flat switch 150 yard of 2Y for him. Not sure why?

UBS [Hayes]: Yeah I would

<u>Tullett Prebon [Cryan]</u>: OK, thanks, any preference on the coupon? 1.105 if that's ok?²²⁹

524. However, when Cryan was out of the office, Jones would set up a wash trade with Danziger and then approach Hayes directly, as shown in the conversation below:

December 10, 2008:

<u>Tullett Prebon [Jones]</u>: Tom Hayes last day before hols today...Any chance of 200 yards 2y mine yours, if can get them to do it?

RBS [Danziger]: If you want.

In a separate Bloomberg Chat...

<u>Tullett Prebon [Jones]</u>: Any chance of a 200yd 2yr switch RBS/RBS?

UBS [Hayes]: Yeah/nett bro

Tullett Prebon [Jones]: Of course, thank your.

UBS [Hayes]: Ie i wont pay bro. Okay then that's fine. 230

525. Once wash trades with RBS and Tullett Prebon became an established practice,
Hayes started using them as a means to pay Cryan illicit brokerage in exchange for his assistance
in coordinating false Yen-LIBOR submissions among Contributor Bank Defendants.

ii. Tullett Brokers Coordinated False Yen-LIBOR Submissions Among Multiple Contributor Bank Defendants

526. Tullett Prebon became more involved in the conspiracy to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives following Darrell Read's departure from ICAP in 2009. With Read gone, UBS trader Hayes contacted Noel Cryan more frequently to coordinate Yen-LIBOR submissions among the Contributor Bank Defendants. For

²²⁹ R. v. Read & Ors., Transcript of Trial at 3 (Nov. 12, 2015).

²³⁰ *Id* at 20, 24.

example, in the conversation below, Hayes offered to "look after" Cryan with wash trades, as he already did with ICAP and R.P. Martin, if Cryan would help manipulate Yen-LIBOR:

February 9, 2009:

<u>UBS [Hayes]</u>: Do you know your cash desk, i.e. the guy who covers yen on your cash desk?

<u>Tullett Prebon [Cryan]</u>: Yes, mate I do.

<u>UBS [Hayes]</u>: Right. From now on I need you to ask him a favour on the fixes. I will make sure it comes back to you. I already do it with ICAP. Basically can you ask him to broker 3M cash, i.e. LIBOR lower for me today? I will look after you off the back of it. I do that for RP Martins too. So emphasize the importance to you. Just suggest it look a little softer to his accounts.

<u>Tullett Prebon [Cryan]</u>: OK, mate, I understand. I will go and speak to him.

<u>UBS [Hayes]</u>: Stuff like that, thanks, mate, is very important to me today.

Tullett Prebon [Cryan]: Just spoke to them, they're on the case. 231

527. Hayes asked Cryan to manipulate Yen-LIBOR again the next day, instructing him to "let them know you'll do better as a result," *i.e.*, to emphasize the wash trades when approaching Yen-LIBOR submitters at other Contributor Bank Defendants to coordinate false Yen-LIBOR submissions:

February 10, 2009:

Tullett Prebon [Cryan]: Morning mate, how are you?

<u>UBS [Hayes]</u>: OK mate. Thanks for help on LIBORs. Today I need low 1M and 3M but high 6M if you can ask your boys.

Tullett Prebon [Cryan]: OK, will do.

<u>UBS [Hayes]</u>: Is important. I'll make sure it evens out.

Tullett Prebon [Cryan]: Just been over there.

²³¹ *Id.* at 29, 40.

<u>UBS [Hayes]</u>: Thanks, mate. Let them know you'll do better as a result.

Tullett Prebon [Cryan]: Got it, mate. 232

528. The next week, Cryan proactively asked Hayes which tenors of Yen-LIBOR to manipulate so he could coordinate false submissions among the Contributor Bank Defendants:

February 16, 2009:

<u>Tullett Prebon [Cryan]</u>: Morning mate, what are you looking for on LIBORs today?

<u>UBS [Hayes]</u>: Low 1M and 3M, 6M higher unchanged.²³³

529. Later in the same chat, Hayes reaffirmed his promise to enter into a wash trade with RBS trader Neil Danziger to pay illicit brokerage as a reward for Tullett Prebon's participation in the conspiracy to manipulate Yen-LIBOR:

February 16, 2009:

<u>UBS [Hayes]</u>: We're getting toward month-end so will cross some stuff up for you then. Normally do 100 to 150 billion to years, brokerage both sides.

<u>Tullett Prebon [Cryan]</u>: Thanks, mate. I know Neil's back today and he's keen to do something as well.

<u>UBS [Hayes]</u>: OK. No problem. Neil is a lush.²³⁴

530. As promised in the communication above, Hayes executed a wash trade with Neil Danziger for \(\frac{1}{2}\) 200 billion on February 16, 2009. As a result of the trade Cryan received \(\frac{1}{2}\) 2.5 million in illicit commission, more than \(\frac{1}{2}\)7,000, for assisting with the Defendants' conspiracy to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives.

²³² *Id.* at 58-59.

²³³ *Id.* at 60-61.

²³⁴ *Id*. at 70.

²³⁵ *Id.* at 71 ("The switch went through as 200 billion").

531. The requests for Tullett Prebon's brokers to coordinate false Yen-LIBOR submissions among Contributor Bank Defendants continued following the February 16, 2009 wash trade. For example, in the conversation below, Hayes asked Cryan to help manipulate Yen-LIBOR in exchange for another wash trade that would pay illicit commission:

February 25, 2009:

UBS [Hayes]: Low everything, please, mate. 1M, 3M, 6M.

Tullett Prebon [Cryan]: Gotcha

<u>UBS [Hayes]</u>: Big effort on getting these LIBORs power today, please, if you can. Really important. If you get 3M down you'll get a decent deal from me tomorrow.

<u>Tullett Prebon [Cryan]</u>: Hear you, mate. I'll go and speak to them again. ²³⁶

532. Tullett Prebon brokers contacted traders and/or submitters at multiple Contributor Bank Defendants to coordinate false Yen-LIBOR submissions. For example, below Hayes sent a message to Cryan listing several banks to target on March 5, 2009, including HSBC, Lloyds, Bank of Tokyo-Mitsubishi, Norinchukin, and Société Générale:

March 5, 2009:

<u>UBS [Hayes]</u>: Hi mate, really, really need low 3m and high 6m. In 3M Bank of Tokyo Mitsubishi is 64, Lloyds is as well. Best not to ask him though. HSBC is 63. Can he go down to 61? Norinchukin is 65 and Société Générale is 64.²³⁷

533. As another example, the communication below demonstrates how Tullett Prebon conspired with and coordinated false Yen-LIBOR submissions among a group of nine Contributor Bank Defendants to manipulate one-month Yen-LIBOR lower on March 31, 2009. This same communication was originally included in UBS' CFTC settlement (Ex. A-2 at 25-26).

²³⁶ *Id.* at 85.

²³⁷ *Id.* at 89.

However, during the Hayes' Trial the names of the conspiring Contributor Bank Defendants, previously designated "Yen Banks A" through "G" were unmasked:

March 31, 2009:

<u>UBS [Hayes]</u>: mate we have to get 1m and 3m down 1m barely fell yesterday real important

Tullett Prebon [Cryan]: yeah ok

<u>UBS [Hayes]</u>: banks to have a go with in 1m are

[Bank of Tokyo-Mitsubishi]

[Lloyds]

[Mizuho Bank]

[Citibank]

[Norinchukin]

[JPMorgan]

[RBS]

[Sumitomo Mitsui]

and [West LB]

<u>Tullett Prebon [Cryan]</u>: got it mate²³⁸

534. Defendants successfully manipulated Yen-LIBOR artificially lower on March 31, 2009. That day, five of the nine Yen-LIBOR Contributor Panel Banks named in the conversation above lowered their one-month Yen-LIBOR submissions relative to the previous day, including Contributor Bank Defendants: (i) Sumitomo Mitsui; (ii) Mizuho Corporate Bank; (iii) RBS; (iv) Norinchukin; and (v) Rabobank. Another Contributor Bank Defendant, Barclays, also lowered its one-month Yen-LIBOR submission on March 31, 2009. As a result, the published one-month Yen-LIBOR fix dropped by a full basis point from the day before.

535. Other Tullett Prebon brokers, including Mark Jones, were also involved in the conspiracy and coordinated false Yen-LIBOR submissions among Contributor Bank Defendants. For example, in the conversation below, Hayes asked Jones to reach out to the submitters at

²³⁸ Ex. A-2 at 25.

Bank of America and Rabobank to request that they raise their six-month Yen-LIBOR submissions after an unsuspected drop of 5 basis points and 6 basis points, respectively, the day before: ²³⁹

June 26, 2009:

Tullett Prebon [Jones]: Here I am

UBS [Hayes]: Hi

<u>UBS [Hayes]</u>: Please tell your cash boys I need a high 6M it's very, very important.

<u>Tullett Prebon [Jones]</u>: What [level] should I suggest? Yesterday's drop was a bit of a shocker in 6M LIBOR. Any idea why that happened?

<u>UBS [Hayes]</u>: 2 people moved it 11 basis points between them...

Tullett Prebon [Jones]: Who was it?

UBS [Hayes]: Rabobank and Bank of America if you can have a word.

Tullett Prebon [Jones]: Will do mate²⁴⁰

536. Jones was successful and, consistent with the conversation above, Bank of America raised its six-month Yen-LIBOR submission by five basis points from 0.70 on June 25 to 0.75, on June 26, 2009. With this increase Bank of America skipped over eight panel banks to move from the seventh-lowest submission on June 25, 2009, to the second-highest submission on June 26, 2009. This jump, from the middle of the back to the top of the range, exactly followed Hayes' plan to move the fixing higher by intentionally submitting quotes that were excluded from the average calculation. *See* ¶¶ 372-377, *supra*.

²³⁹ During this time, Hayes was conspiring with multiple Contributor Bank Defendants to manipulate six-month Yen-LIBOR higher as part of Operation 6M. *See* ¶¶ 679-690, *infra*.

²⁴⁰ R. v. Read & Ors., No. 14-cr-272, Transcript of Trial at 87-88 (Oct. 12, 2015).

- I. The Contributor Bank Defendants Colluded Directly with One Another To Manipulate Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives
 - 1. UBS' Collusion with Other Panel Banks²⁴¹
- 537. Hayes augmented his internal efforts to manipulate Yen-LIBOR and Euroyen TIBOR for multiple tenors and the prices of Euroyen-based derivatives by coordinating with derivatives traders at other panel banks. Hayes wanted to better exploit the averaging methodology used to calculate fixings, maximizing the impact of each corrupted submission on the official daily fixing of Yen-LIBOR and Euroyen TIBOR.
- 538. By at least January 2007, Hayes began coordinating regularly with derivatives traders at other panel banks. Hayes communicated with traders employed by at least four Contributor Bank Defendants, RBS, JPMorgan, Deutsche Bank, and HSBC, that he knew personally or worked with previously. Most of the examples below are communications from the Hayes Trial. Some of these communications were previously released, in part, in various Defendants' government settlements, however, the traders' identities and the banks that they worked for were obscured.
- 539. For their own manipulative purposes of benefiting their Euroyen-based derivatives trading positions, certain of the derivatives traders at the other banks sought reciprocating assistance from Hayes to make requests on their behalf to UBS' submitters. Hayes readily agreed to help them and often encouraged them to ask for help as a way to curry favor and ensure his requests were accommodated.
- 540. Numerous communications between Hayes and derivatives traders at the other panel banks reveal:

²⁴¹ See also Ex. A-2, pp. 17-20.

- o descriptions of Hayes' strategy and his success in keeping Euroyen rates "artificially high";
- o how, as with the internal requests, Hayes pressed traders at the other banks for assistance particularly on key fixing dates around the IMM dates or the turn of the calendar year;
- how traders believed that Yen-LIBOR was vulnerable to manipulation and routinely submitted requests for artificial Yen-LIBOR submissions to benefit their derivatives positions;
- that communications requesting false Yen-LIBOR submissions frequently covered a range of days, such that a single request could result in multiple days of artificial Yen-LIBOR submissions impacting the published Yen-LIBOR during the same period;
- o the pressure Hayes felt to keep making money for UBS; and
- o that the traders believed they succeeded at times.
- On February 2, 2007, Hayes described this method of manipulating Yen-LIBOR 541. in an electronic chat with his counterpart Yen derivatives trader ("Trader-A1"), Will Hall, at RBS ("Bank-A"):

February 2, 2007:

RBS [Hall]: jimmy tan²⁴² telling me the spread will widen over golden week??

UBS [Hayes]: no way

RBS [Hall]: that's what I thought

he pays 15.5 too for that spread if you wanna do any more

UBS [Haves]: he is an idiot

UBS [Hayes]: 3m libor is too high cause I have kept it artificially high

RBS [Hall]: how

²⁴² Jimmy Tan, an RBS Japan Yen trader in Singapore, was identified as Senior Yen Trader in RBS' CFTC settlement.

<u>UBS [Hayes]</u>: being mates with the cash desks, [JPMorgan] Chase and I always help each other out

542. Later in the same chat, Hayes shared proprietary and commercially-sensitive information with Hall, letting him know that he was "long libor," *i.e.*, his Euroyen-based derivatives positions would financially benefit from an increase in the rate. As a result, Hayes planned to manipulate Yen-LIBOR higher, before causing a "2bp swing in the fix," by manipulating it artificially lower:

February 2, 2007:

RBS [Hall]: Ok that's useful to know. So I assume 1s4s it will be soft

<u>UBS [Hayes]</u>: well I am long libor in 1v4m so will try to keep high them but basicly 1bp is too high right now and come may I'll get it 1bp too low net net a 2bp swing in the fix

RBS [Hall]: Good man²⁴³

543. Soon after telling Hall that he was manipulating the Yen market, Hayes asked Hall to make false Yen-LIBOR submissions. For example, in the conversation below, Hayes asked Hall to keep RBS' one-month Yen-LIBOR submissions artificially lower over the next several days:

February 8, 2007:

<u>UBS [Hayes]</u>: can you do me a huge favour, can you ask your cash guys to set lm libor low for the next few days . . . i'll return the favour as when you need it ... as long as it doesn't go against your fixes . . . have 30m jpy of fixes over the next few days

RBS [Hall]: yeah i will try²⁴⁴

544. Hall successfully kept RBS' one-month Yen-LIBOR submission artificially lower and the next day Hayes thanked him for his manipulation:

²⁴³ Ex. A-2 at 19.

²⁴⁴ Ex B-1 at 23.

February 9, 2007:

UBS [Hayes]: thx help lm y/day appreciated

RBS [Hall]: no worries²⁴⁵

545. The two traders then discussed weather their trading positions, an thus their

preferred Yen-LIBOR levels were aligned, and Hayes requested a low fixing:

February 9, 2007:

<u>UBS [Hayes]</u>: can you ask for a low lm [Yen-LIBOR] again today pls if ok? . . .

todays fix is 12m . . . you need anything on 3m or 6m?

RBS [Hall]: no my book is still tiny i will go for low [Yen] libor again

... it suits me too as i am short the spreads

UBS [Hayes]: ok thanks...wait till you get clumped in 300b of 6m fra!... then you

care...that's a 15m fix....typically I have about 10m-15m fixing every day in one

bucket or another²⁴⁶

546. Later in the same chat, Hall and Hayes discussed their mutual interest in a low

one-month and three-month Yen-LIBOR. Hayes told Hall that he would contact JPMorgan to

request false Yen-LIBOR submissions as well:

February 9, 2007:

RBS [Hall]: i told my cash guy i want low lm and 3m fixes and high 6 m that suits

uu right

UBS [Hayes]: yes absolutely, is that ok with you? we will be exactly the same . . .

am going to talk to [JPMorgan] as well

RBS [Hall]: perfect

<u>UBS [Hayes]</u>: cool . . . you in monday?

RBS [Hall]: yeah a bit

²⁴⁵ *Id.* at 24.

²⁴⁶ *Id*.

217

<u>UBS [Hayes]</u>: ok get them to set the same fixes monday as well if ok

RBS [Hall]: sure²⁴⁷

547. Hayes messaged Hall on February 13, 2007 to request RBS keep its one-month Yen-LIBOR submissions low until February 15, 2007. In an electronic chat on February 15, 2007, Hayes directed Hall to get RBS' Yen-LIBOR submitter to submit artificially low one-month and high six-month Yen-LIBOR submissions. Hall agreed to do so:

February 15, 2007:

<u>UBS [Hayes]</u>: can you ask for a low lm fix again ...wd really help

* * *

RBS [Hall]: sure it suite me to get low 1s and s . . . 3s

<u>UBS [Hayes]</u>: thanks need high 6's tho if ok with you?

* * *

RBS [Hall]: i have got nothing in 6s until the 19 fix date when i need a high one too

<u>UBS [Hayes]</u>: ok thx [Will]

<u>RBS [Hall]</u>: so yeah thats fine with me my cash guy is rubbish at guessing where [Yen] libors are going to be but he listens to what i say

UBS [Hayes]: thats a releif²⁴⁸

548. Later that same day, Hall asked Hayes, "how many people can you get to put this lm [Yen] libor low." Hayes responded, "well us [JPMorgan] and a few others i think." Within minutes of this exchange, Hayes asked Roger Darin to contribute a low one-month and six-month Yen-LIBOR submission. Hayes then asked Roger Darin if he knew anyone at another Contributor Panel bank that he "could have a word with . . . as a favour." Roger Darin replied

²⁴⁷ *Id.* at 25-26.

 $^{^{248}}$ *Id*.

that he lacked that "edge" but suggested that Hayes "have a word with [JPMorgan]." In response, Hayes told Roger Darin submitter that he had "already done that . . . and rbs." ²⁴⁹

- 549. On a few occasions, Hall reported back to Hayes that he expected RBS' Yen-LIBOR submitters to accommodate Hayes' request. For example, in an April 20, 2007 electronic chat, Hayes stated to Will Hall: "I know I only talk to you when I need something but if you could ask your guys to keep 3m [Yen-LIBOR] low wd be massive help as long as it doesn't interfere with your stuff . . . tx in advance."
 - 550. Approximately 30 minutes later, Hayes and Hall had the following chat:

April 20, 2007:

<u>UBS [Hayes]</u>: I know I only talk to you when I need something but if you could ask your guys to keep 3m low wd be massive help as long as it doesn't interfere with your stuff tx in advance . . . mate did you manage to spk to your cash boys?

RBS [Hall]: yes u owe me they are going 65 and 71

<u>UBS Hayes</u>: thx mate yes I do . . . in fact I owe you big time

- 551. Approximately 45 minutes later, after checking to see if RBS lowered its three-month Yen-LIBOR submission to 65, Hayes sent the following message to Will Hall: "Mate they set 64! . . . that's beyond the call of duty!" ²⁵⁰
- 552. Hayes rewarded Hall and RBS for their participation in the conspiracy with proprietary, market-sensitive information, and by having UBS' submitters make false Yen-LIBOR submissions for RBS' benefit. For example, Hayes often told Hall where UBS was putting its Yen-LIBOR submissions so that Hall could use that information to his advantage in trading Euroyen-based derivatives.

²⁴⁹ *Id.* at 26.

²⁵⁰ Ex. A-2 at 19.

February 26, 2007:

<u>UBS [Hayes]</u>: can you try to get your guys to leave their 3m and lm [Yen] libors unchanged?

RBS [Hall]: yeah i want low ones so that suits me

UBS [Hayes]: gd thx mate ... we are going low too

553. Hayes also asked UBS' submitters to make false Yen-LIBOR submissions for Hall (RBS) in return for RBS' false Yen-LIBOR submissions which benefitted Hayes' (UBS') Euroven-derivatives positions. For example:

March 2, 2007:

<u>RBS [Hall]</u>: please please low 6m [Yen-LIBOR] fix on monday . . . i have got a [b]ig fix

UBS [Hayes]: sure no worries

<u>UBS [Hayes]</u>: how big is the fix mate?

RBS [Hall]: 100 us big for me

UBS [Hayes]: 10m jpy? . . . yes thats quite lrge 200b 6m²⁵¹

554. Hall's requests for false Yen-LIBOR submissions, and Hayes' agreement to get UBS' submitters to accommodate those false requests, continued in March 2007 and beyond, as evidenced in the following chats:

March 6, 2007:

RBS [Hall]: yeah can u go fr low everything plse . . . i am

<u>UBS [Hayes]</u>: will do cld do with high threes but won't get it we are the lowest²⁵²

555. Later that day, Hayes relayed Hall's request to UBS' Yen-LIBOR submitter:

²⁵¹ Ex. B-1 at 27.

²⁵² *Id.* at 27-28.

March 6, 2007:

<u>UBS [Hayes]</u>: hi pls don't forget low lm and 6m!:)... have lots fixing

UBS [Joachim Ruh]: mate i won't²⁵³

556. Others at RBS knew that Hall was conspiring with Hayes, for example:

March 27, 2008:

RBS [Tan]: we change the [Yen] libor lower?

RBS [Danziger]: [Will Hall] asked [a junior backup submitter] to put it low

<u>RBS [Danziger]</u>: does he need it or Tom Hayes ask him to do it? . . . cos UBS wanted low²⁵⁴

557. During 2008, Hayes started to send requests for false Yen-LIBOR submissions to RBS trader Brent Davies, "Trader-6" in RBS' DOJ settlement. For example, in the email conversation below, Hayes asked Davies to secure low six-month Yen-LIBOR submissions from RBS over the next few days:

May 7, 2008:

<u>UBS [Hayes]</u>: Hi [Brent] . . . can you please ask for a low 6m in jpy for the next few days. Hope you are ok, was good seeing you last week

<u>RBS [Davies]</u>: Hi mate, I mentioned it to our guy on Friday and he seemed to have no problem with it, so fingers crossed.²⁵⁵

558. These requests continued at least throughout 2008, while Davies was still employed by RBS, as evidenced in the following instant message between Hayes and Davies in November 2008.

²⁵³ *Id.* at 28.

²⁵⁴ *Id.* at 30.

²⁵⁵ *Id.* at 30-31.

November 3, 2008:

<u>UBS [Hayes]</u>: can you do me a favour and ask your guys for a low JPY 3m fix

today if they can? . . . wld be massiive help

RBS [Davies]: will ask

<u>UBS [Hayes]</u>: have monster fix . . . thanks [Brent]²⁵⁶

559. Davies left RBS in (or around) July 2009 to become a cash broker for Broker

Defendant ICAP. While at ICAP, Davies maintained his relationship with RBS' Yen-LIBOR

"Submitter 1," Paul White, and continued to conspire with Hayes to manipulate RBS' Yen-

LIBOR submissions. For example, on March 3, 2010, Hayes (who by that time had left UBS

and joined Citibank) messaged Davies to request a false Yen-LIBOR submission from RBS:

March 3, 2010:

<u>Citibank [Hayes]</u>: i really need a low 3m Yen-LIBOR into the imm... any favours you can get with the due at RBS would be much appreciated... even if

he on;ly move 3m down lbp . . . from 25 to 24

<u>ICAP [Davies]</u>: I'll give him a nudge later, see what he can do

<u>Citibank [Hayes]</u>: thanks mate . . . really really would appreciate that

<u>ICAP [Davies]</u>: haven't seen him since i left so I might buy him a steak to catch

up

Citibank [Hayes]: yeah²⁵⁷

560. Davies reached out to White, offering a steak in exchange for a false Yen-LIBOR

submission and letting him know it was for their "mutual friend" Tom Hayes:

March 3, 2010:

<u>ICAP [Davies]</u>: can i pick ur brain?

RBS [White]: yeah

²⁵⁶ *Id.* at 31.

²⁵⁷ Ex. C-1 at 35.

222

<u>ICAP [Davies]</u>: u see 3m Yen-LIBOR going anywhere btween now and imm?

<u>RBS [White]</u>: looks fairly static to be honest, poss more pressure on the upside, but not alot

<u>ICAP [Davies]</u>: oh. we hve a mutual friend who'd love to see it go down, no chance at all?

RBS [White]: haha TH [Tom Hayes] by chance

ICAP [Davies]: shhh

<u>RBS [White]</u>: hehehe , mine should remain flat , always suits me if anything to go lower as i reve funds

<u>ICAP [Davies]</u>: gotcha, thanks, and, if u cud see ur way to a small drop there might be a steak in it for ya, haha

RBS [White]: noted;-)²⁵⁸

561. The next day, March 4, 2010, RBS' three-month Yen-LIBOR submission moved down by one basis point, from 25 to 24, consistent with Hayes' request. In response to this beneficial submission, White messaged Davies:

March 4, 2010:

RBS [White]: Libor lower ;-)

ICAP [Davies]: good work!!!!²⁵⁹

562. White continued to lower RBS' Yen-LIBOR submissions through March 9, 2010 by one basis point, and then lowered RBS' submission an additional basis point by March 11, 2010, tying Rabobank, another known Hayes co-conspirator, for the lowest Yen-LIBOR submission that day. RBS' Yen-LIBOR submission remained tied with Rabobank's submission through March 17, 2010, the March 2010 IMM fixing date that Hayes originally referenced. On

²⁵⁸ *Id.* at 32-33.

²⁵⁹ *Id*. at 33.

March 17, 2010, RBS' Yen-LIBOR submission was 2.375 basis points below the BBA Yen-LIBOR fix.

563. RBS' traders and submitters knew that by working with Hayes they were participating in a far-reaching and broad conspiracy to rig Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. For example, in the conversation below, RBS Yen Manager Jezri Mohideen acknowledged that one of the means that Hayes used to manipulated Yen-LIBOR was "partnering up with a number of cash guys," *i.e.*, Yen-LIBOR submitters at multiple banks:

August 20, 2007:

<u>RBS [Mohideen]</u>: it seems to be [UBS] is pushing for these [Yen] libors partnering up with number of cash guys as well

RBS [Hall]: yeah [Hayes] all over it²⁶⁰

564. RBS Senior Yen-Trader Jimmy Tan acknowledged in mid-2007 that Yen-LIBOR had become a "cartel now" among UBS, RBS, and the other contributor panel banks:

August 20, 2007:

RBS [Tan]: this libor setting is getting nutss

<u>Bank A Trader</u>: im puzzled as to why 3m libor fixing not coming off after the FED action

<u>Bank B Trader</u>: [UBS] is lending dolls through my currencies in 3 month do usee him doing the same in urs

<u>RBS [Tan]</u>: yes[,] he always led usd in my mkt[,] **the Yen-LIBOR is a cartel now**

RBS [Tan]: its just amazing how libor fixing can make you that much money

²⁶⁰ Ex. B-4 at 14.

<u>RBS [Tan]</u>: its a cartel now in london[.] they smack all the 1yr irs .. and fix it very high or low [.] they smack all the 1yr irs .. and fix it very high or low²⁶¹

565. Later in 2007, RBS traders and Jezri Mohideen described how there is "pure manipulation going on" with the Yen-LIBOR fixing:

December 5, 2007:

RBS [Hall]: FYI [Yen] libors higher again today [...]

Yen Trader 4: 'ucksake. keep ours low if poss. don't understand why needs to go up in yen

RBS [Hall]: no reason dude[,] [Bank C] and [Bank D] went high yest

Yen Trader 4: send the boys round [...]

RBS [Mohideen]: pure manipulation going on 262

566. Taking full advantage of this "pure manipulation," RBS continued to systematically conspire with Hayes to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives for their financial benefit at the expense of Plaintiffs and the Class during the remainder of the Class Period.

567. Hayes also contacted Yen derivatives "Trader-B," Guillaume Adolph, at Bank-B, Deutsche Bank, to request Yen-LIBOR submissions that would benefit UBS' Yen trading positions. For example, in the conversation below, Adolph and Hayes shared commercially-sensitive information regarding their proprietary Euroyen-based derivatives positions, and agreed to work together in making false submissions:

August 28, 2008:

<u>UBS [Hayes]</u>: That is thru my mid of 7/5...am axed but not that axed...city went nuts and distorted the mkr...how about we split it...67.875...then I can go home

²⁶¹ *Id*.

²⁶² Ex. B-4 at 15.

Deutsche Bank [Adolph]: ok I give you 50 b in each

<u>UBS [Hayes]</u>: look i appreciate the business and the calls we should try to share info where possible also let me know if you need fixes one way or the other

<u>Deutsche Bank [Adolph]</u>: sure sorry mate have to go too busy on many things

<u>UBS [Hayes]</u>: and i'll do the same if you have any joy with you setters

<u>Deutsche Bank [Adolph]</u>: no prob²⁶³

568. In the following conversation, Adolph agreed to manipulate Yen-LIBOR to help Hayes who stood to make ¥ 75 million, approximately \$750,000, for each basis point six-month Yen-LIBOR decreased:

September 18, 2008:

<u>UBS [Hayes]</u>: you got any ax [interest] on 6m fix tonight?

Deutsche Bank [Adolph]: absolutely none but I can help

UBS [Hayes]: Can you set low as a favour for me?

Deutsche Bank [Adolph]: done

UBS [Hayes]: i'll return favour when i can just ask...have 75m m jpy a bp tonight

Deutsche Bank [Adolph]: np

UBS [Hayes]: thanks so much

Deutsche Bank [Adolph]: 73/90/99 am putting libors

UBS [Hayes]: great thanks mate²⁶⁴

569. The next day, Hayes offered Adolph a deal at a favorable price, "in fact cause you help me on 6m yday," rewarding Adolph's successful manipulation of six-month Yen-LIBOR. ²⁶⁵

²⁶³ Ex. I-1 at 50-51.

²⁶⁴ *Id.* at 51.

570. Adolph continued to manipulate Yen-LIBOR for Hayes through at least 2009. In the conversation below, Hayes asked Adolph (and Adolph agreed) to manipulate six-month Yen-LIBOR to financially benefit a massive Euroyen-based derivatives position that Hayes held:

May 21, 2009:

<u>UBS [Hayes]</u>: cld you do me a favour would you mind moving your 6m libor up a bit today I have a gigantic fix...i am limit short cant...sell anymore just watch

Deutsche Bank [Adolph]: i can do that

UBS [Hayes]: thx²⁶⁶

- 571. Consistent with Hayes' request, on May 21, 2009, six-month Yen-LIBOR increased by six-tenths of a basis point.
- 572. Deutsche Bank conspired with UBS so frequently that Adolph at times asked Hayes, "where should i put my libors" and listed various options for Hayes to choose. ²⁶⁷

 Deutsche Bank also participated in several of the known long-term manipulation campaigns with UBS, including "Operation 6M" and "The Turn Campaign" during which UBS, HSBC, Deutsche Bank worked together to stagger drops in their six month Yen-LIBOR submissions during the summer of 2009. *See* ¶¶ 685-690, *infra*.
- 573. In another example of a long-term manipulation, Hayes started planning in March 2010, roughly ten months prior to the December 2010 IMM date, to manipulate three-month Yen-LIBOR higher to benefit his "massive" Euroyen-based derivatives position. Adolph again agreed to participate in the manipulation as Hayes promised to return the favor:

March 26, 2010:

<u>UBS [Hayes]</u>: you got much in 3m libor in dec?

²⁶⁵ *Id.* at 52.

²⁶⁶ *Id.* at 54.

²⁶⁷ *Id.* at 57.

Deutsche Bank [Adolph]: nothing

UBS [Hayes]: ok i really gonna need 3m lib up a bit in dec have massive imm fix vs [Nomura]

Deutsche Bank [Adolph]: hum np

UBS [Hayes]: thanks

Deutsche Bank [Adolph]: we have time by then

UBS [Hayes]: anything i can help with let me know²⁶⁸

574. Hayes and Adolph also aligned their trading positions to benefit from planned manipulations of Euroyen TIBOR. The CFTC found that Adolph made requests for false Euroyen TIBOR submissions on a "handful of occasions" to Deutsche Bank TIBOR submitters in Tokyo. At least some of these requests were made in order to benefit Hayes' Euroyen-based derivatives positions.²⁶⁹

Hayes also asked his counterpart Yen derivatives trader ("Trader-C"), Stuart 575. Wiley, at JPMorgan ("Bank-C") to have JPMorgan contribute Yen-LIBOR submissions to benefit UBS' Yen derivatives trading positions. For example, in a January 29, 2007 electronic chat with Hayes, Stuart Wiley asked: "[A]nything you need on [Yen] libors today? High 6m [Yen-LIBOR] would help me." Hayes responded, "high 3m I'll sort our 6m rate for you thanks." As promised, Hayes made a request to the UBS Yen-LIBOR submitter for a high six-month contribution.

576. In this January 19, 2007 conversation between Hayes and Wiley, Hayes asked Wiley to keep JPMorgan's three-month Yen-LIBOR submissions artificially high. Hayes wanted to financially benefit several of his Euroyen-based derivatives positions which were set

²⁶⁸ *Id.* at 58.

²⁶⁹ Ex. I-2 at 26 n.24.

to price settle over the next couple of days, referred to by Hayes as "massive 3m fixes." Hayes told Wiley he would return the favor by artificially driving up six-month Yen-LIBOR to benefit JPMorgan's Euroyen-based derivatives positions. Wiley agreed to the manipulation.

January 19, 2007:

<u>UBS [Hayes]</u>: Hi Stuart, bit cheeky but if you know who sets your libors and you aren't the other way...I have some absolutely massive 3m fixes the next few days and would really appreciate a high 3m fix. Chase were one of the lowest y/day at .51. Anytimes I can return the favour let me know as the guys here are pretty accommodating to me.

Cheers Tom

<u>JPMorgan [Wiley]</u>: I will try my best, but really fed up with my guys, wanted a high 6m yesterday, but came in really low (our guys one of the main cultirpts) – got quite badly hit on that

<u>UBS [Hayes]</u>: Your and me both, you need 6m high? If so will get my guys to set high for you today, yesterday they set 3m up at 57 for me!

<u>JPMorgan [Wiley]</u>: Got nothing significant for next 7 days – so will try to get high for you – just really gutted about yesterday cost me alot²⁷⁰

577. Wiley was successful at keeping JPMorgan's three-month Yen-LIBOR submissions and the three-month Yen-LIBOR fix artificially higher as indicated by Hayes' email below:

January 22, 2007:

<u>UBS [Hayes]</u>: Hi Stuart, thanks for the 3m fix the other day. If you could try to keep 3m up again wd be much appreciated. If you have 6m axe let me know...

Thanks

Tom

²⁷⁰ Ex. A-2 at 18-19.

578. Hayes also conspired with JPMorgan trader Paul Glands during the Class Period. For instance, in this January 25, 2007, Glands agreed to keep JPMorgan's three-month Yen-LIBOR submission artificially high.

January 25, 2007:

<u>UBS [Hayes]</u>: could you do me a favour and ask your cash guys to try and keep 3m libor up today...thanks

JPMorgan [Glands]: WILL DO

579. Other communications evidence Hayes' willingness to return the favor by making false Yen-LIBOR submissions to benefit JPMorgan's Euroyen-based derivatives positions. For example, in the conversation below, Hayes asked Wiley to set JPMorgan's one-month Yen-LIBOR submission artificially low over the next few days. Hayes' request coincided with the same low one-month Yen-LIBOR request Hayes made to RBS. *See* ¶ 543, *supra*. In return, Hayes offered to assist JPMorgan with the six-month Yen-LIBOR fix (referred to as "6m" by Hayes) or anything else. Even after receiving the news that JPMorgan might not be able to help with the one-month fixing, Hayes offered (and JPMorgan agreed) to have UBS make false six-month Yen-LIBOR submissions "all week" for JPMorgan's benefit.

February 8, 2007:

<u>UBS [Hayes]</u>: Hi Stuart, if you could ask your guys to set 1m low for the next few days would really appreciate it as have 30m jpy fixes, if you need anything done with 6m pls let me know.

Cheers Tom.

<u>JPMorgan [Wiley]</u>: Unfortunately they've gone all "we need to be independent" on us so unfortunately nothing much I can do for a while

<u>UBS [Hayes]</u>: no worries my guys are reasonable so just let me know when you need something

JPMorgan [Wiley]: thanks appreciate it need low 6m for all of next week

<u>UBS [Hayes]</u>: you got it

580. As evidenced in this July 2, 2008 instant message, Hayes also repaid JPMorgan for its false Yen-LIBOR submissions and participation in the conspiracy by helping JPMorgan "trade out" of positions that were not financially going JPMorgan's way.

July 2, 2008:

<u>UBS [Hayes]</u>: Mate if you need to trade out of them let me know. Think 6m is approaching a level it won't go up from much further. Just give me what mid you are using and I'll see if it suits...

at the bank, to influence HSBC's Yen-LIBOR submissions for the benefit of UBS' Euroyen-based derivatives positions. For example, on June 28, 2007, Hayes messaged O'Leary: "pls ask ur mate for high 6m [Yen-LIBOR] mate . . . wd be really really grateful." O'Leary responded: "will do, for the record he's def not my 'mate'! . . . but I'll [send him an electronic chat]." As requested, approximately 15 minutes later, O'Leary sent an electronic chat to the HSBC Yen-LIBOR submitter stating, "high 6m yen libor would be gd according to my brother!" The Yen-LIBOR submitter responded, "WILL DO MY BEST."

582. Hayes knew that coordinating with other Contributor Panel Banks to manipulate Yen-LIBOR and Euroyen-based derivatives prices was wrong. In a July 22, 2009, electronic chat with ICAP broker, Darrell Read, Hayes described his plan to coordinate Yen-LIBOR submissions with other Contributor Panel Banks over the next few weeks while staggering drops in submissions so as to avoid detection:

July 22, 2009:

<u>UBS [Hayes]</u>: 11th aug is the big date . . . i still have lots of 6m [Yen-LIBOR] fixings till the 10th

<u>ICAP [Read]</u>: if you drop your 6m [Yen-LIBOR] dramatically on the 11th mate, it will look v fishy, especially if [HSBC] and [Deutsche Bank] go with you. I'd be v careful how you play it, there might be cause for a drop as you cross into a new month but a couple of weeks in might get people questioning you.

<u>UBS [Hayes]</u>: don't worry will stagger the drops . . . ie 5bp then 5bp

ICAP [Read]: ok mate, don't want you getting into sh it

<u>UBS [Hayes]</u>: us then [Deutsche Bank] then [HSBC] then us then [Deutsche Bank] then [HSBC]

ICAP [Read]: great the plan is hatched and sounds sensible

- 2. As Part of Its DOJ Deferred Prosecution Agreement, RBS Admitted To Colluding with UBS to Manipulate Yen-LIBOR²⁷¹
- 583. From at least as early as February 2007, an RBS derivatives trader, Will Hall, and Hayes agreed to request that their respective Yen-LIBOR submitters contribute Yen-LIBOR submissions to benefit their Euroyen-based derivatives positions. In 2008, Hayes and another RBS trader, Brent Davies, agreed to make requests to benefit Hayes' trading positions. In 2010, after Davies left RBS and moved Broker Defendant ICAP, Hayes enlisted Davies to convey requests for false Yen-LIBOR submissions to RBS' Yen-LIBOR submitters. Examples of manipulative communications between Hayes, and RBS traders Will Hall and Brent Davies are included above at ¶¶ 541-561, *supra*.
- 584. As early as February 2, 2007, RBS trader Hall also knew that Hayes communicated with another Contributor Bank Defendant, JPMorgan, as part of Hayes' effort to manipulate Yen-LIBOR. In an electronic chat with Hall that day, Hayes stated that he had kept

²⁷¹ See also Ex. B-4 at 19-21.

three month Yen-LIBOR artificially high by "being mates with the cash desks, [JPMorgan] and I

always help each other out."272

585. On numerous occasions in 2007, Hayes requested that Hall ask the RBS Yen-

LIBOR submitter to move RBS' Yen-LIBOR submission in a particular direction or to

contribute a particular Yen-LIBOR submission in order to benefit Hayes' trading positions. Hall

often agreed to make the request. On a few occasions, Hall similarly requested that Hayes ask

UBS' Yen-LIBOR submitter to make a false submissions that would benefit his trading positons,

and Hayes agreed to make the request.

586. For example, over a period of approximately ten days in February 2007, Hayes

and Hall discussed lowering one-month Yen-LIBOR to benefit their trading positions in addition

to coordinating requests in other tenors. 273 See ¶ 543, supra. Later in the same chat, Hayes

noted that he "lost lots today...hence really need a hand on 1m lib...pls don't forget." Hall

responded, "ok i will try my best." Hayes and Hall then discussed other topics, and at the end of

the conversation, Hayes reminded Hall of his request for a low one-month Yen-LIBOR

submission:

February 8, 2007:

UBS [Hayes]: oh well i am off home dreaming of a low 1m libor!

RBS [Hall]: good luck what sort fo level do you want

<u>UBS [Hayes]</u>: if you can get a .42 six that wd be great...fix...not six

RBS [Hall]: 0.42

UBS [Hayes]: thats the one!

²⁷² Ex. B-1 at 22.

²⁷³ *Id.* at 22-23.

233

RBS [Hall]: ok will speak to me guy in a sec²⁷⁴

587. Over the next several days, Hayes and Hall continued to discuss their mutual interest in manipulating Yen-LIBOR artificially lower during February 2007. See ¶¶ 544-548, supra.

588. Hayes' requests to Hall for false Yen-LIBOR submissions continued throughout 2007. For example, in an electronic chat the two traders had the following exchange:

November 1, 2007:

<u>UBS [Hayes]</u>: hello mate, real big favour to ask...could you try for low 6m fix today pls wld be most appreciated...thx mate

RBS [Hall]: will try my best dude how u??

<u>UBS [Hall]</u>: ok, trading like an idiot today, to be honest just want to take some risk off my book before i come back in dec, have had ok year but management still pushing me for more, have huge 6m fix so if you could help out today would really really really appreciate it! how are you?²⁷⁶

589. During 2008, just as Hayes had done with Will Hall, Hayes asked RBS trader Brent Davies to request that RBS' Yen-LIBOR submitter contribute RBS' Yen-LIBOR submissions at levels that benefited Hayes' trading positions. *See* ¶ 557, *supra*. In or around July 2009, Davies left RBS and began working as a cash broker for Broker Defendant ICAP. While at ICAP, Davies maintained his relationship with RBS Yen-LIBOR submitter Paul White and continued to assist Hayes with influencing RBS' Yen-LIBOR submissions. *See* ¶¶ 559-561, *supra*.

²⁷⁴ *Id.* at 23-24.

²⁷⁵ *Id.* at 24-27.

²⁷⁶ *Id.* at 29.

²⁷⁷ *Id*. at 31.

- 3. As Part of Their DOJ Deferred Prosecution Agreements, Rabobank and Lloyds Each Admitted That They Had a Standing Agreement to Collude²⁷⁸
- 590. From as early as May 2006 and continuing at least through October 2008, "Submitter-4," Paul Robson, and a Lloyds Yen trader ("Trader-B"), Andy Doe, had an agreement that they would, upon request, contribute Yen-LIBOR submissions to benefit each other's Euroyen-based derivatives positions, or the Euroyen-based derivatives positions of other traders, whenever doing so did not adversely affect their own Euroyen-based derivatives positions. As Doe explained in an email forwarding a Yen-LIBOR submission request from Robson to the Yen-LIBOR submitters at Lloyds: "We usually try and help each other out...but only if it suits."
- 591. On June 27, 2006, for example, Rabobank's Robson communicated with Lloyds' Doe: "i need a high lmth today so i will be setting an obseenly high lmth." Doe responded: "sure mate no worries...give us an idea where and i'll try n oblige...;)," to which Robson replied: "ok great well at mo thinking of setting mine around 17." Doe accommodated Robson's manipulation request, as Lloyds' one-month submission for that day was 0.17.
- 592. On July 6, 2006, Robson communicated with Doe: "for info i need a high lmth set today i will be setting something ridiclous like 28 or 29 for info." That day, Rabobank's one-month Yen-LIBOR submission was 0.29, an increase of two basis points, making Rabobank's submission the highest submission on the Contributor Panel. Likewise, Lloyds' one-month Yen-LIBOR submission also increased by two basis points.
- 593. On occasions when Robson or Doe were unable to, or failed to, accommodate the other's Euroyen-based derivatives positions, an effort was sometimes made to explain the attendant circumstances and to preserve their agreement. For example, on March 28, 2008,

²⁷⁸ Ex. D-2 at 22-24; Ex. H-2 at 2, 11-13.

Robson preemptively contacted Doe to explain that their submissions would be at odds that day: "morning skip - [Takayuki Yagami] has asked me to set high libors today - gave me levels of lm 82, 3m 94....6m 1.02." Doe replied: "sry mate cant oblige today...i need em lower!!!" Robson then explained: "yes was told by [a third party]...just thought i'd let you know why mine will be higher...and you don't get cross with me."

- 594. Similarly, on January 5, 2007, Doe explained how he had mistakenly failed to accommodate a request for a false Yen-LIBOR submission from Robson: "just b4 you beat me up....I was in meeting so didn't do me libors today...thk they put .52 for 1s" Robson answered: "hahah no thats fine thats what i set too cheers skip."
- 595. Robson and Doe's agreement was also used to manipulate Yen-LIBOR to benefit other traders at both Rabobank and Lloyds. For example, on May 10, 2006, Robson made a manipulation request of Doe on behalf of Rabobank's Yen trader, Paul Thompson, for a low sixmonth submission: "re our conversation yesterday about libors...for info i've been asked by my Singapore man to help him out with a silly low 6m fixing today.. ...just for your info." Doe responded: "Tell him I'll do same if he gets me a job!!!!"
- 596. When Robson testified during the Allen/Conti criminal trial, he explained how his submission on May 10, 2006 impacted the six-month Yen-LIBOR fix. Robson testified that by lowering his Yen-LIBOR submission for Paul Thompson, Rabobank dropped out of the Yen-LIBOR fix for that date and affected the Yen-LIBOR averaging process by pushing another low Yen-LIBOR submission into the calculation:

Government [Slipperly]: Because you favored lower you said you had to go to 26 for [Paul Thompson] Thommo. Can you explain what actually happened on that day?

Rabobank [Robson]: So on the left-hand side it shows what I should have sent, which is .3. Right-hand side shows what I

actually set, which is .26, at the request of Paul Thompson. By setting .26 I have dropped into the dropout zone at the bottom. However, if I had actually set .30, like I was supposed to have, I would not have been in the dropout zone. My number would have been taken into consideration in the LIBOR calculation. However, as I have posted .26 and into the dropout zone, I have then nudged another bank that should have been discarded into the calculation itself; therefore, affecting the actual averaging process.²⁷⁹

- 597. On July 27, 2006, Robson contacted Doe on behalf of Takayuki Yagami to request a high one-month submission consistent with Rabobank's submission: "[Takayuki Yagami] wants a high lm fix from me today....am going to set .37." Doe agreed: "that suits mate," "so happy to ablige." Lloyds' submission jumped from 0.35 to 0.37 between July 26, 2006, and July 27, 2006, a move that took Lloyds' submission from being tied as the lowest Yen-LIBOR submission to being tied for the second highest.
- 598. The following day, July 28, 2006, Robson and Yagami conferred internally regarding their mutual desires for another high fixing. Robson stated to Yagami: "setting a high lm again today I need it!" to which Yagami responded: "yes pls mate...I need a higher lm libor too." Within approximately 20 minutes, Robson contacted Doe at Lloyds and stated: "morning skipper will be setting an obscenely high lm again today...poss 38 just fyi." Doe responded, "(K)...oh dear..my poor customers....hehehe!! manual input libors again today then!!!!" Both banks' submissions on July 28, 2006, moved up one basis point, from 0.37 to 0.38, a move which again placed their submissions as the second-highest submissions on the Contributor Panel that day.
- 599. As discussed *supra* at ¶ 345, on March 19, 2008, Robson and Doe agreed to manipulate Rabobank's and Lloyds' six-month Yen-LIBOR submissions higher. On that date, Doe submitted a six-month Yen-LIBOR of 1.15, while Rabobank's submission went from being

²⁷⁹ United States v. Allen, No. 14-cr-272, Testimony of Trial at 349 (Oct. 19, 2015).

tied as the tenth-highest submission on the Contributor Panel on the previous day to being the second highest submission on the Contributor Panel.

600. Likewise, Doe had a July 19, 2007 telephone conversation with another trader at Lloyds ("Trader-C"), in which Trader-C made a manipulation request of Doe for three-month Yen-LIBOR and Doe offered to extend Trader-C's manipulation request to Robson:

<u>Lloyds [Trader-C]</u>: I need a little favor today for what it's worth. I don't know what you've been doing in 3 months, but we've got like a fixing of 83 billion on Monday, [unintelligible] Low threes, [unintelligible]

<u>Lloyds [Doe]</u>: What you want to do, what you want me to put low libor in, is that what you are saying?

<u>Lloyds [Trader-C]</u>: Yeah, low libor in the threes.

Lloyds [Doe]: Yeah, 'course I can, mate. No worries at all.

<u>Lloyds [Trader-C]</u>: That would be nice.

<u>Lloyds [Doe]</u>: I'll have a word with [Robson] as well, he'll drop it down for you as well I'm sure, [unintelligible] It needs more than one, mate, trust me. [unintelligible] Where do you want it? And I'll just pitch it wherever you want, [unintelligible]

<u>Lloyds [Trader-C]</u>: Um...roughly where it was yesterday, that's fine. That makes us ten under...well, just under ten under [unintelligible] we've been funding lately.

<u>Lloyds [Doe]</u>: [unintelligible] Yeah, sure.

601. A short time later, Doe followed through and contacted Robson with Trader-C's manipulation request: "mrng beautiful if u can would love a low fixing in 3s libor today...." Paul Robson then asked: "ok skip - what u need?" to which Doe answered: ".77 if poss but just no higher than yest!!" Robson agreed, stating: "no prob." On that day, both Rabobank and Lloyds submitted 0.77 for the three-month Yen-LIBOR, placing both banks' submissions in a tie for the second-lowest submission on the Contributor Panel.

- 602. Both Robson's criminal guilty plea allocution and his testimony at the Allen/Conti Trial confirm this standing relationship between Robson and Doe. When Robson pled guilty in this District to conspiracy to commit wire fraud and bank fraud, he admitted that when he received requests from Paul Thompson, Tetsuya Motomura, and Takayuki Yagami, he "conveyed some of these requests [for favorable submissions] to a submitter at another bank and requested that he match the way in which I made my submissions and I in turn reciprocated these actions with him." The "submitter at another bank" that Robson referred to is Lloyds' Andy Doe.
- 603. Further, during the Allen/Conti Trial, Robson discussed how he made an arrangement with Doe to align their Yen-LIBOR submissions to benefit Lloyds' and Rabobank's Euroyen-based derivatives positions:

Government [Slipperly]: What was one of the reasons you would interact with [Andy Doe] in connection to LIBOR?

<u>Rabobank [Robson]</u>: We came to an arrangement where we would discuss our LIBOR settings, trying to align with each other, alert each other if we were going to be setting anything extreme, and a few occasions we made requests of each other as well.²⁸¹

4. Deutsche Bank Regularly Colluded With Contributor Bank Defendants

604. As shown above, from at least mid-2008 through mid-2010, Deutsche Bank "Trader-11," Guillaume Adolph, regularly conspired with UBS Senior Yen Trader Tom Hayes to manipulate Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives. *See* 567-574, *supra*. Adolph and Hayes aligned their Euroyen-based derivatives poisons, sharing commercially-sensitive proprietary information about Deutsche Bank's and UBS' trading books, so that both Defendants would mutually benefit from their manipulative conduct. Adolph was

²⁸⁰ United States v. Robson, No. 14-cr-272, ECF 21, 12 16:19 (Aug. 18, 2014).

²⁸¹ *Id.* at 350 (Oct. 19, 2015).

Deutsche Bank's Yen-LIBOR submitter during 2008 and 2009 and directly manipulated Deutsche Bank's Yen-LIBOR submissions to accommodate requests for false submissions from Hayes and other Contributor Bank Defendants. For example, Deutsche Bank admitted that it colluded with several other Contributor Bank Defendants besides UBS. Direct evidence of Deutsche Bank's collusion with Citibank is shown below. See ¶ 637-640, infra. Plaintiffs reasonably believe that evidence of Deutsche Banks' collusive misconduct with the other Contributor Bank Defendants will be revealed given an opportunity for discovery.

5. HSBC was a key member of the Conspiracy.

605. During the Class Period, UBS and HSBC routinely conspired to manipulate Yen-LIBOR. *See, e.g.*, ¶¶ 685-690, *infra* (alternating lower Yen-LIBOR submissions with UBS during Operation 6M).

606. The Hayes Trial and Broker Trial, as well as R.P. Martin's settlement cooperation, provide numerous examples of HSBC conspiring with UBS to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. UBS and HSBC conspired to manipulate through direct communication and through other co-conspirators, such as R.P. Martin broker Terry Farr. Plaintiffs' independent economic analysis, based on discovery produced to date, including money market data reflecting "Yen" interbank offered rates, identifies hundreds of instances consistent with false reporting manipulation by HSBC during the Class Period.

607. For example, on June 28, 2007, Hayes conspired with his stepbrother Peter O'Leary, a trader at HSBC, to set "6m" Yen-LIBOR "high":

²⁸² Ex. I-5 at 8.

June 28, 2007:

UBS [Hayes]: pls ask ur mate for high 6m mate...wd be really really grateful

HSBC [O'Leary]: will do, for the record he's deff not my 'mate'!...but I'll bbg [Bloomberg] him

UBS [Hayes]: Cheers²⁸³

608. O'Leary sent a Bloomberg message to HSBC's Yen-LIBOR submitter, Chris Porter, seeking a "high 6m yen libor" informing HSBC's Yen-LIBOR request was coming directly from O'Leary's "brother":

June 28, 2007:

HSBC [O'Leary]: high 6m yen libor would be gd according to my brother!

HSBC [Porter]: WILL DO MY BEST²⁸⁴

609. O'Leary confirmed to Hayes that his manipulative request for a high six-month Yen-LIBOR had been sent successfully to HSBC's Yen-LIBOR submitter:

June 28, 2007:

HSBC [O'Leary]: Sent darcy a mail so we'll see!

UBS [Hayes]: thx mate

610. UBS also conspired with HSBC through R.P. Martin's Farr. Farr was good friends with HSBC's Yen-LIBOR submitter Luke Madden. Many of these manipulative requests were made through unrecorded means, including personal cell phones and in-person meetings. This allowed their knowingly unlawful manipulative conduct to be concealed. Examples of manipulative requests between UBS and HSBC's Madden through R.P. Martin appear below in ¶¶ 611-629.

²⁸³ Ex. A-1 at 27.

²⁸⁴ *Id.* at 28.

- 611. On May 12, 2008, UBS' Hayes and HSBC's Madden conspired through R.P. Martin's Farr in getting "yen LIBORs lower." HSBC lowered its one-month, three-month, and six-month Yen-LIBOR submissions by two basis points or more on May 12, 2008.
- 612. In September 2008, UBS' Hayes and HSBC's Madden conspired through R.P. Martin's Farr, to lower their three-month Yen-LIBOR submissions to manipulate Euroyen-based derivatives prices:

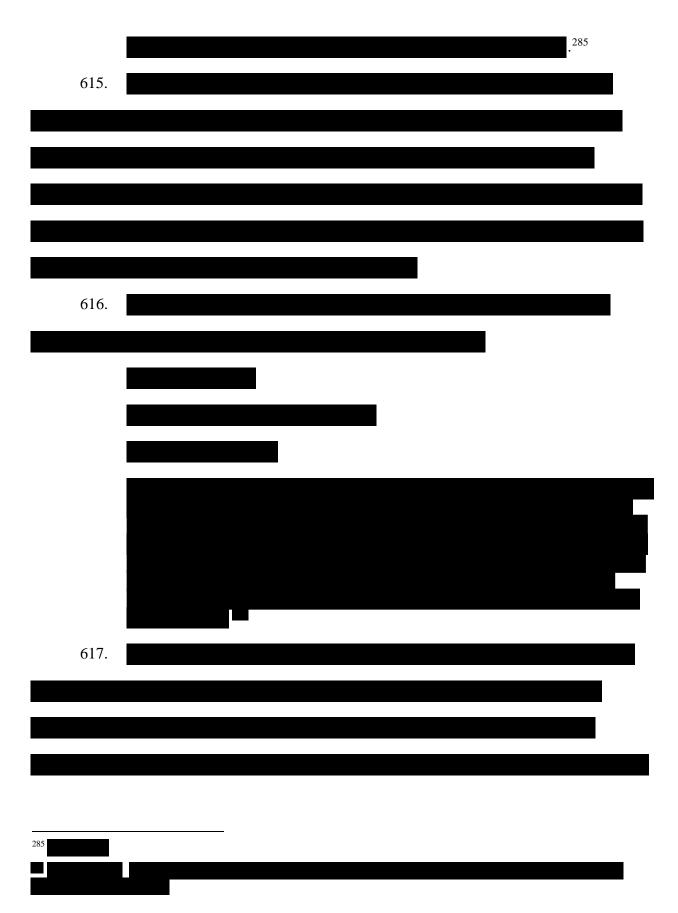
September 9, 2008

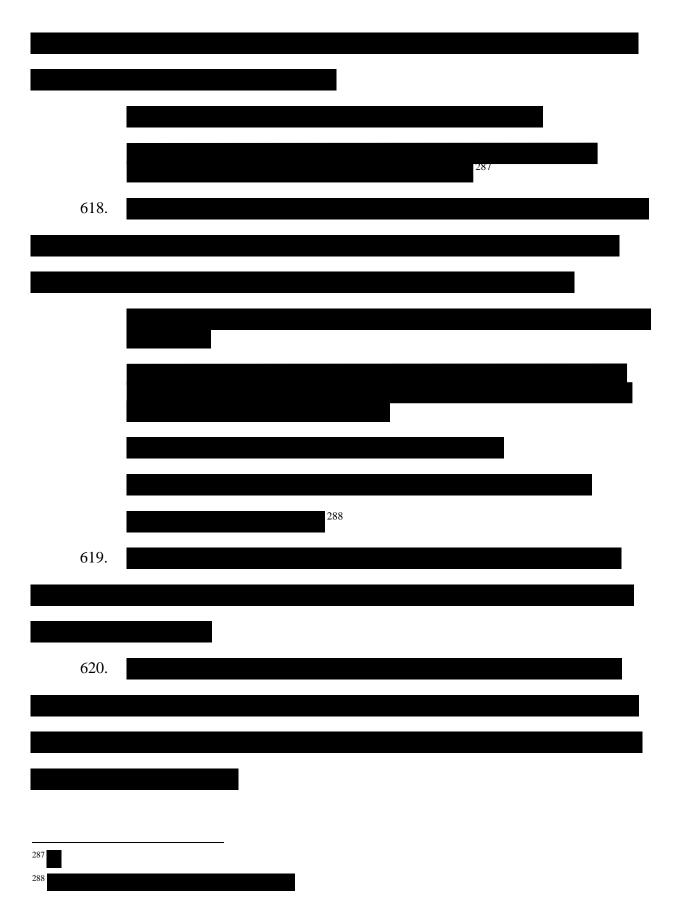
<u>UBS [Hayes]</u>: DUDE, great libors, keep it up, I owe you. *hsbc, lloyds* both 90 in 3m ... maybe we can broke em down to 89? And mizuho

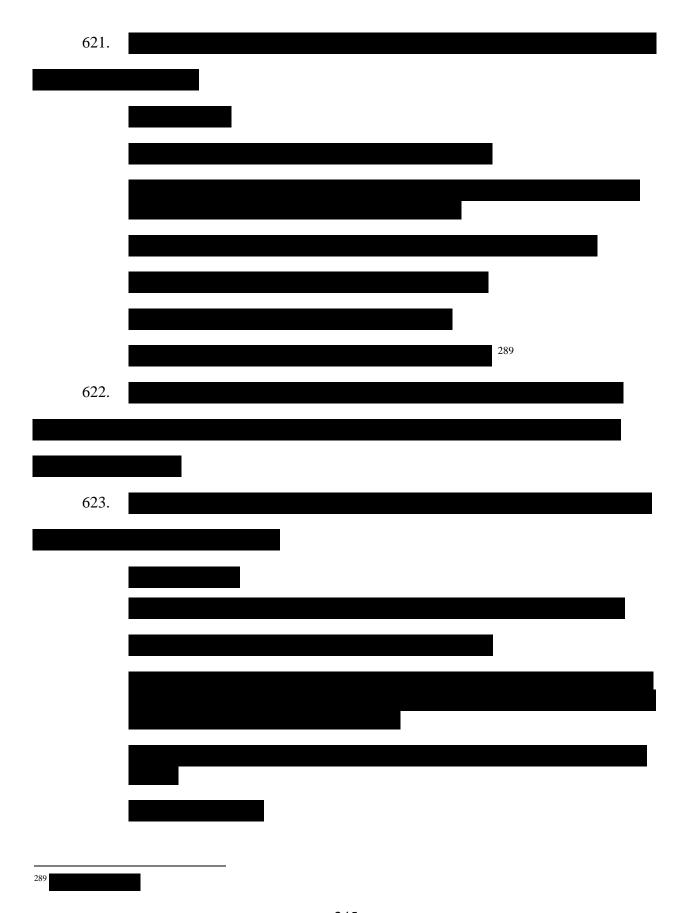
R.P. Martin [Farr]: yeah think will be mate there aint any bids really now 1, 3s so this will help the cause....

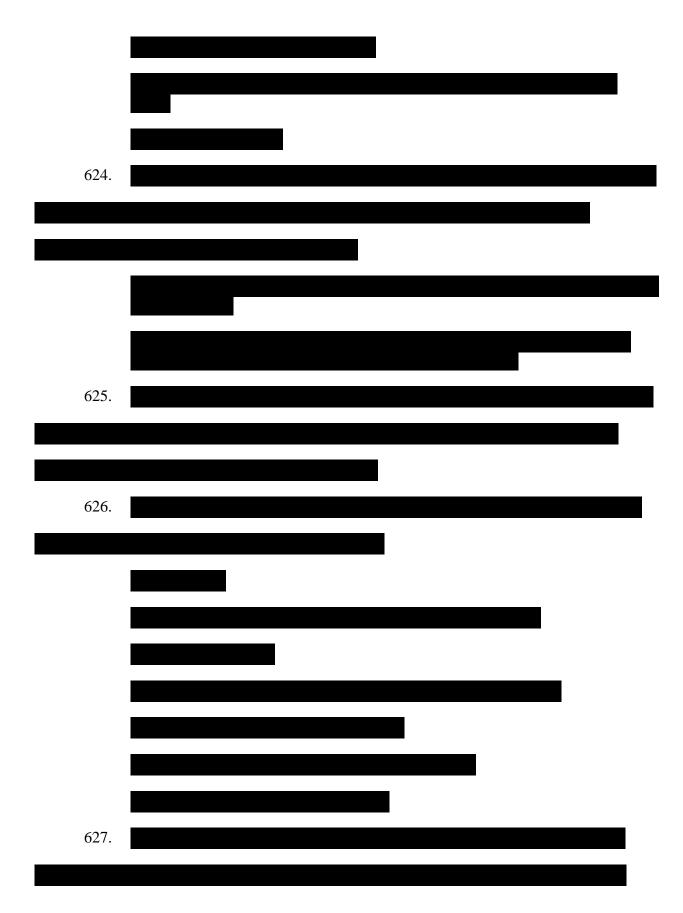
613. In furtherance of the conspiracy, HSBC lowered its one-month and three-month Yen-LIBOR submissions on September 10, 2008. HSBC lowered its one-month Yen-LIBOR from .65 to .63 and HSBC lowered its three-month Yen-LIBOR submission by two basis points, from .90 to .88 on September 10, 2008. The one-month and three-month Yen-LIBOR fix decreased.

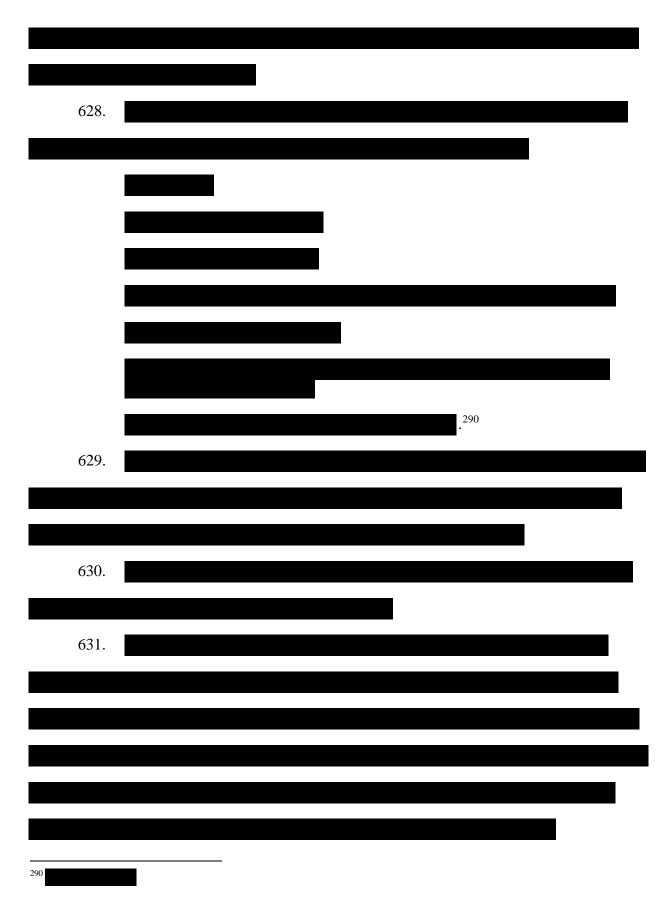


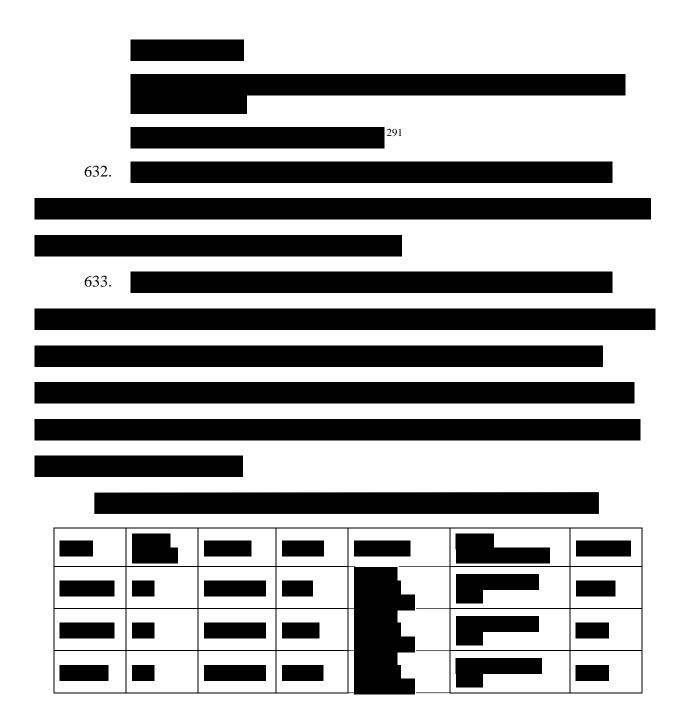






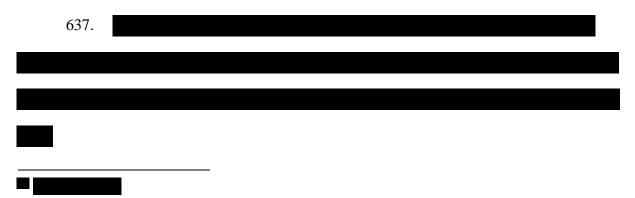


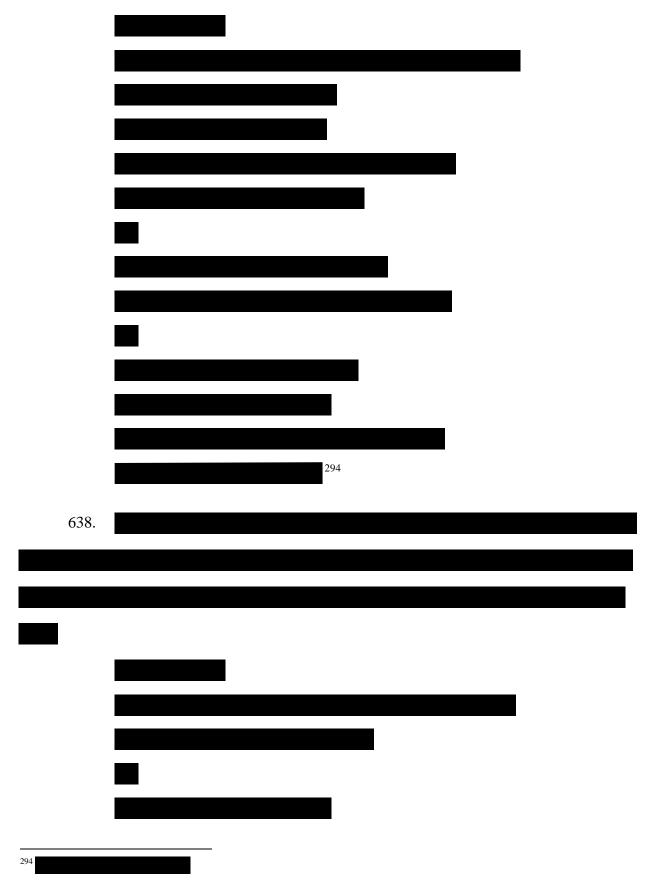


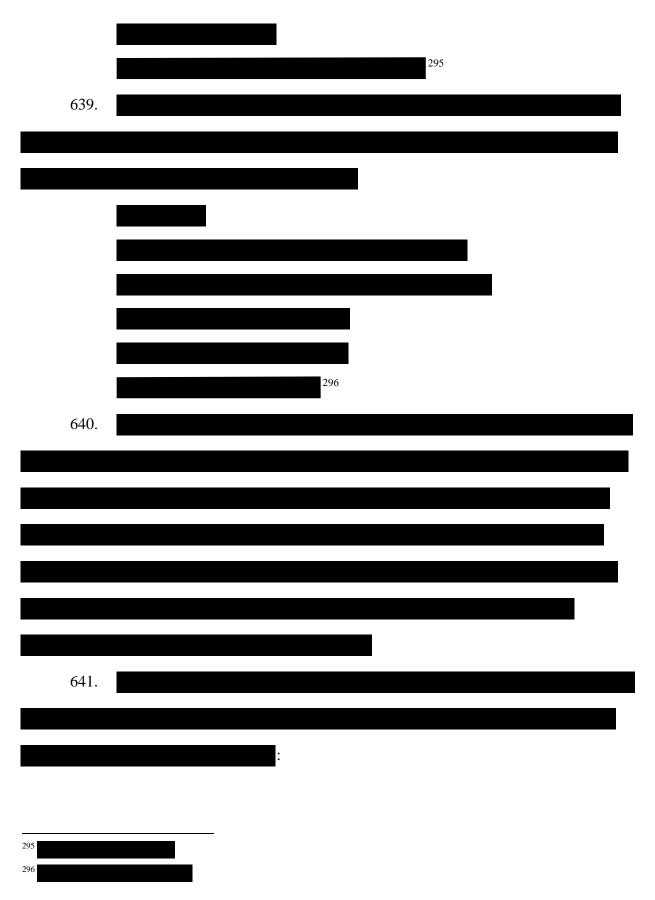


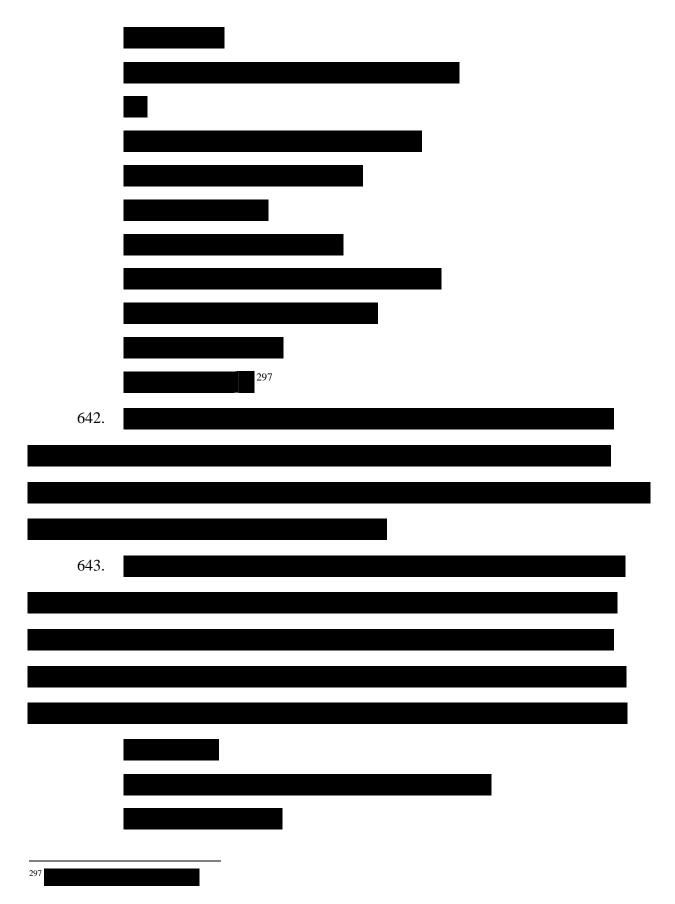


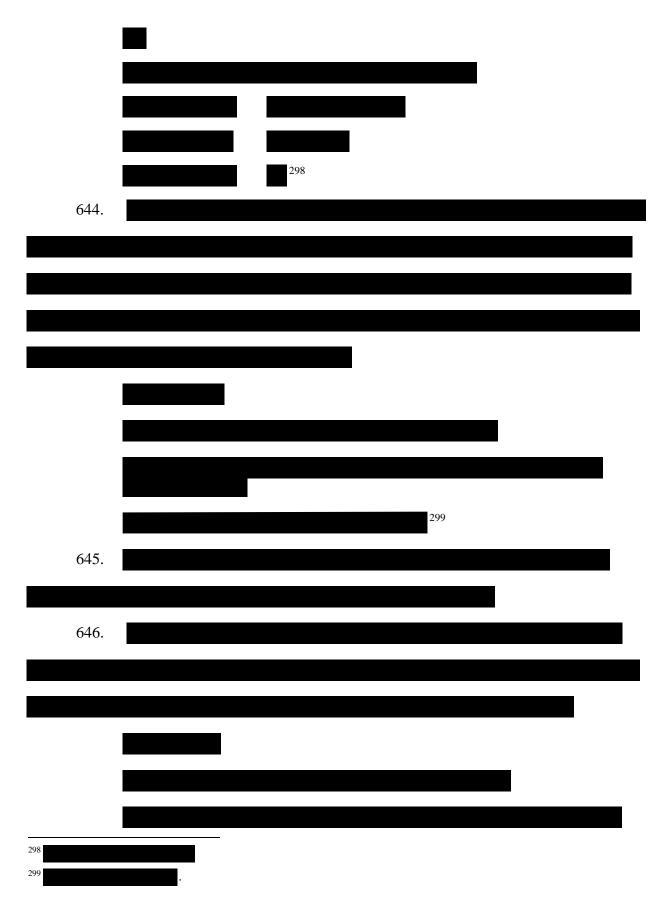
- 6. Citibank Joined the Conspiracy Manipulate Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives
- 634. During the Class Period, Citibank acted in furtherance of the conspiracy to manipulate Yen-LIBOR, Euroyen-TIBOR, and the prices of Euroyen-based derivatives. In December 2009, Citibank hired UBS trader Tom Hayes, offering him a \$3.5 million "special cash award" to come trade Euroyen-based derivatives for Citibank. Hayes was fired by Citibank ten months later following an internal investigation by the bank. That investigation was triggered by a complaint from a Citibank Yen-LIBOR submitter who had received a request from Hayes for a false Yen-LIBOR submission.
- 635. During the time of his employment at Citibank, Hayes made attempts to influence both Citibank's Yen-LIBOR and Euroyen TIBOR submissions, and the submissions of other Contributor Bank Defendants.
- 636. Such interbank or external requests for false reports by Hayes took place with many of the same traders, submitters, and brokers that Hayes colluded with during the time of his employment at UBS.

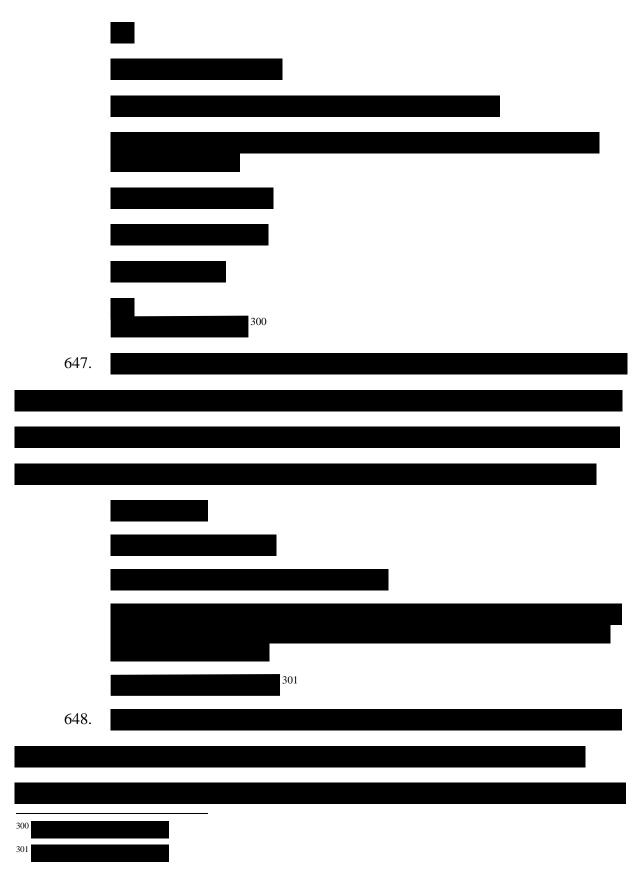












- 7. Currently Known Long-Term Campaigns to Manipulate Yen-LIBOR, Euroyen TIBOR and the Prices of Euroyen Based Derivatives
- 649. Defendants also planned and agreed to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives for extended periods of time by coordinating their manipulative conduct for months if not longer. Based on information revealed in Defendants' government settlements, at the Hayes Trial, the Broker Trial, and documents produced by R.P. Martin, Plaintiffs have identified at least three long-term manipulation campaigns: (1) coordinated manipulation of three-month Yen LIBOR from January to May 2007; (2) the "Turn Campaign," the coordinated manipulation of six-month Yen-LIBOR artificially higher through the end of June 2009; and (3) "Operation 6M," the coordinated manipulation of six-month Yen-LIBOR and three-month Euroyen TIBOR from July to September 2009. During each of these campaigns, Defendants conspired with each other and used multiple means of manipulation to rig Yen-LIBOR, Euroyen TIBOR and the prices Euroyen-based derivatives.
 - a. The January to May 2007 Campaign: Defendants Coordinated the Manipulation of Three-Month Yen-LIBOR
- Yen-LIBOR. However, Hayes had particularly large trading positions tied to three month Yen-LIBOR that matured in January and February 2007 and in April and May 2007. As a result he embarked on a coordinated campaign to manipulate three-month Yen-LIBOR for the benefit of his Euroyen-based derivatives positions. For this purpose, Hayes made manipulative requests to UBS's Yen-LIBOR submitters, brokers and other Yen-LIBOR Contributor Banks. Hayes reciprocated the requests to other Yen-LIBOR Contributor Banks by offering to adjust UBS's Yen-LIBOR submissions to suit their Euroyen-based derivatives positions.

i. Phase One

- 651. Between January 17 and February 5, 2007, in the first phase of his campaign, Hayes made at least 18 manipulative requests for false three-month Yen-LIBOR submissions to UBS' Yen-LIBOR submitters. He also made at least six requests for false one-month Yen-LIBOR submissions and at least 10 requests for false six-month Yen-LIBOR submissions.
- 652. For example on January 24, 2007, Hayes contacted UBS manager Roger Darin, who supervised and provided input to the UBS Trader-Submitter making UBS' Yen-LIBOR submissions and issued a "standing order" to keep three-month and six-month Yen-LIBOR higher:

January 24, 2007:

<u>UBS [Hayes]</u>: try to keep 6m and 3m libors up.

UBS [Darin]: standing order, sir.

UBS [Hayes]: thx roger³⁰²

653. The same day, Trader-Submitter A, complained to Darin that Hayes and Trader B wanted conflicting submissions. Trader-Submitter A complained:

January 24, 2007:

<u>UBS [Trader-Submitter A]</u>: As I said to you, I got to say this is majorly frustrating that those guys can give us shit as much as they like...One guy [Hayes] wants us to do one thing and [UBS Trader B] wants us to do another....

654. On February 5, 2007, Hayes contacted Roger Darin and Trader-Submitter A together in an electronic chat:

³⁰² Ex. A-3 at 2.

February 5, 2007

<u>UBS [Hayes]</u>: last 3m fix if you cld keep high (6m wd prefer high but not urgent) and if we cld keep 1m low wd be appreciated, **if doesn't suit let me know and**

maybe we can offset our fixes thx any help much appreciated.

655. Hayes' offer to "offset our fixes" was an express recognition that his requests may

conflict with the trading positions of Darin. In order to safeguard against his requests from being

rejected, Hayes offered trades to Darin to align their interests and "offset" any losses that Darin

may incur by carrying out Hayes' request.

656. Throughout this period, UBS's submissions were consistently in the top quartile

of Contributor Panel Banks for three-month Yen-LIBOR except on one occasion when it fell into

the middle of the pack for one day on January 24, 2007.

657. As part of the same campaign, on at least four occasions in January 2007, Hayes

made requests to JPMorgan traders to persuade them to cause their bank's submitters to increase

their three-month Yen-LIBOR submissions. In return, Hayes offered to ask UBS's Trader-

Submitters to make Yen-LIBOR submissions to suit the positions of the JPMorgan traders:

January 19, 2007:

UBS [Hayes]:

To: Stewart Wiley [JPMorgan]

Hi stuart, bit cheeky but if you know who sets your libors and you aren't the other way I have some absolutely massive 3m fixes the next few days and would really appreciate a high 3m fix, chase were one of the lowest y/day at .51. Anytimes I

can return the favour let me know as the guys here are pretty accommodating to

me.

Cheers tom³⁰³

³⁰³ Ex. A-2 at 18.

257

658. Phase one was successful as Hayes explained to RBS trader Will Hall in an electronic chat that UBS and JPMorgan had manipulated three-month Yen-LIBOR artificially higher by February 2007:

February 2, 2007:

<u>UBS [Hayes]</u>: mates with the cash desks, Chase and i always help each other out

UBS [Hayes]: 3m libor is too high cause I have kept it artificially high.

RBS [Hall]: ok that's useful to know so I assume come 1s4s it will be soft

<u>UBS [Hayes]</u>: well I am long libor in 1v4m so will try to keep high them but basically is 1bp too high right now and come may I'll get it 1bp too low net net a 2bp swing in the fix³⁰⁴

ii. Phase Two: lower three-month Yen-LIBOR during April 2007 and May 2007

659. Between the end of March 2007 and the middle of May 2007, as part of the second phase of the 2007 campaign, Hayes made at least twenty-seven requests for low three-month Yen-LIBOR submissions. In all but one instance (when the request went unanswered), UBS' Trader-Submitters agreed to the requests. Over this period, Hayes also made at least twenty-three manipulative requests for false six-month Yen-LIBOR submissions. In addition, UBS manager Roger Darin solicited requests from Hayes on at least one occasion.

660. For example, on March 29, 2007, Hayes made a request for an artificially lower three-month Yen-LIBOR submission to UBS manager Roger Darin:

March 29, 2007

<u>UBS [Hayes]</u>: ...What are we going to set?

<u>UBS [Darin]</u>: too early to say yet ... prob[ably] .69 would be our unbiased contribution.

UBS [Hayes]: ok wd really help if we could keep 3m low pls

³⁰⁴ *Id.* at 19.

<u>UBS [Darin]</u>: as i said before - i dun mind helping on your fixings, but i'm not setting libor 7bp away from the truth i'll get ubs banned if i do that, no interest in that.

<u>UBS [Hayes]</u>: Ok obviously no int in that happening either, not asking for it to be 7bp from reality...anyway, any help appreciated.³⁰⁵

- 661. Darin complied with Hayes' request on March 29, 2007, making an artificially lower three-month Yen-LIBOR submission of 0.67.
- 662. In recognition that his request might conflict with Darin's own trading positions, on April 17, 2007, Hayes offered to trade a "fra" *i.e.*, forward rate agreement, in order to eliminate any conflict between their respective positions:

April 17, 2007:

<u>UBS [Hayes]</u>: ... really need low libors today in everything, but esp 6m, let me know if that suits or if not can we do a fra? Thx.

<u>UBS [Darin]</u>: I've got nothing today, will keep 'em low. ³⁰⁶

- 663. On April 17, 2007, UBS' one month submission fell 1.5 basis points to 0.625. The three-month Yen-LIBOR submission remained unchanged from the previous day at 0.65. UBS' six-month Yen-LIBOR submission fell two basis points to 0.68.
- 664. Darin and UBS' Yen-LIBOR submitters followed almost every request Hayes made during the Contributor Bank Defendants' campaign to manipulate three-month Yen-LIBOR artificially lower between March 2007 and May 2007. For example, of the twenty-seven requests for false three-month Yen-LIBOR submissions Hayes made, twenty-six were affirmatively agreed to by UBS Trader-Submitters. As a result, thirty-four of the thirty-six three-

³⁰⁵ Ex. A-1 at 11.

³⁰⁶ Ex. A-3 at 16.

month Yen-LIBOR submissions UBS made during this period were lower than the published rate, consistent with Hayes' requests.

665. In the second phase of the 2007 campaign, Hayes made at least six requests to traders and submitters at other banks, including on April 20, 2007, to RBS trader Will Hall:

April 20, 2007:

UBS [Hayes]: mate did you manage to spk to your cash boys?

RBS [Hall]: yes u owe me they are going 65 and 71

RBS [Hall]: thx mate yes I do . . . in fact I owe you big time!

<u>UBS [Hayes]</u>: Mate they set 64! . . . that's beyond the call of duty! ³⁰⁷

666. Hayes also requested false Yen-LIBOR submissions from HSBC, contacting his stepbrother Peter O'Leary to request a low three-month Yen-LIBOR submission the same day:

April 20, 2007:

<u>UBS [Hayes]</u>: if you can go have a word with the guy...

<u>HSBC [O'Leary]</u>: Yeah I need to go down and see those guys and say hello so I will do

<u>UBS [Hayes]</u>: Well when you do just say to them "oh do you fancy setting a low Yen three month LIBOR?" Well no, just say "if you can set a low Yen three month LIBOR you really help my brother out

667.

³⁰⁷ *Id*.

³⁰⁸



b. Summer 2009: The "Turn Campaign" and "Operation 6M"

- 669. Throughout his tenure at UBS, Hayes routinely employed each of his means of manipulation—internal requests, collusion with other panel banks, and coordination with brokers. At times, he used all three means simultaneously for a longer period to achieve his objective. This is illustrated by two long-term efforts from June 2009 through August 2009, which were dubbed the "turn campaign" and "operation 6m."
- 670. By June 2009, Hayes had amassed significant positions in Yen interest rate swaps that were priced, benchmarked, and/or settled based on one-month, three-month, and six-month Yen-LIBOR. Hayes' positions became so large at various points that he was close to exceeding internal risk limits imposed by UBS. The largest positions were tied to six-month Yen-LIBOR. Rather than entering into legitimate hedging positions that would offset his risk, however, Hayes made two coordinated and sustained pushes, to manipulate six-month Yen-LIBOR and Euroyen TIBOR in ways that would benefit his massive positions.

iii. The Turn Campaign

671. The Turn Campaign commenced in early June 2009. Hayes' derivatives positions tied to six-month Yen-LIBOR were due to reset or mature on June 29, 2009, and would benefit

³⁰⁹

from a high six-month Yen-LIBOR. A single basis point move in Yen-LIBOR was worth approximately \$2 million to UBS.

672. Hayes coordinated with the UBS Yen-LIBOR submitter Rolf Keiser, Deutsche Bank Yen-LIBOR submitter Guillaume Adolph, and brokers at ICAP, R.P. Martin, and Tullett Prebon to try to keep six-month Yen-LIBOR artificially high. For example, Hayes explained to Tullet Prebon's Noel Cryan how they should accomplish his objective in late May 2009:

May 28, 2009:

<u>UBS [Hayes]</u>: At the end of June, the six-month fix will be in July and it will go over the year-end turn

Tullett Prebon [Cryan]: Yeah that's right

<u>UBS [Hayes]</u>: Now it's vital for me that that goes up a lot when that happens

Tullett Prebon [Cryan]: Right, gotcha

<u>UBS [Hayes]</u>: Last year it went up about three basis points and I need the same to happen again this year

<u>Tullett Prebon [Cryan]</u>: So basically talk the turn up

<u>UBS [Hayes]</u>: Yeah, so basically start talking – from the middle of – like when you start getting towards the end of June, start talking it up, put it in people's minds, make sure they're aware that sixes is going over the turn so on the day it happens, they actually move it. Because if they don't move it then, it aint going to move

<u>Tullett Prebon [Cryan]</u>: No, gotcha absolutely gotcha

<u>UBS [Hayes]</u>: make some efforts on the LIBORs particularly when it goes up the turn, right.

<u>Tullett Prebon [Cryan]</u>: Yeah.

<u>UBS [Hayes]</u>: If you get that up, when it crosses the turn, if you get that up, I will fucking reward you

<u>Tullett Prebon [Cryan]</u>: Right, no worries, I'll go and speak to him again

<u>UBS [Hayes]</u>: Between you and me I've got two and a half million bucks pointing at it, so if it goes up, I'm marking it at one a half points then, if it goes up three points then obviously I make an extra \$4 million or something so

<u>Tullett Prebon [Cryan]</u>: You're going to hear nothing about the six-month libor going up over the turn then for the next-

<u>UBS [Hayes]</u>: Yeah yeah

Tullett Prebon [Cryan]: weeks

<u>UBS [Hayes]</u>: Yeah, it's not really so much from now, but the next month it has to be one of those things

Tullett Prebon [Cryan]: Yeah

<u>UBS [Hayes]</u>: Any favours they can call in whatever, you know, take basically you take the guys out for like a strip club or whatever the night before

<u>Tullett Prebon [Cryan]</u>: Yeah, done. I'll go and make sure we're sorted

673. Hayes quantified and emphasized the potential impact on UBS' derivatives trading positions for his co-conspirators. He encouraged the brokers to push submitters at other panel banks for high six-month Yen-LIBOR submissions and to provide "spoof bids" to the market so market participants believed the rates were rising. At times, some of the brokers agreed to enforce the plan by confronting other banks that acted against his interests.





<u>UBS [Hayes]</u>: i have such big positions on **monday i have 1.5m usd a bp 6m fix** will ask [Guillaume Adolph] for a one day favour we will move up for one day too

<u>ICAP [Read]</u>: i know mate, i'm trying to keep on top of it, if it moves out of line for 10 sees you know i'll see it and pull it back.³¹¹

June 16, 2009:

<u>ICAP [Read]</u>: Good morning mate...**the "turn campaign" beings today**. Will put an email together at lunch time to [Colin Goodman]

UBS [Hayes]: thx³¹²

June 17, 2009:

212	
313	

³¹¹ Ex. A-2 at 30.

³¹² *Id*.

³¹³

June 24, 2009:

<u>UBS [Hayes]</u>: 6m is huge for me on monday ...

<u>ICAP [Read]</u>: i have been putting arbi pressure on [Colin Goodman] and [Danny Wilkinson] ... would help your cause to also speak to [Danny] on friday regarding the turn squeeze and its importance ... i will remind you.

<u>UBS [Hayes]</u>: ...thanks i will get [Terry Farr] on the case too remind me to get in touch with [Guillaume at Deutsche Bank].

<u>ICAP [Read]</u>: **yeah need to pull out the big guns for this one**, don't let [Adolph] forget either. :-)es³¹⁴

June 25, 2009:

<u>UBS [Hayes]</u>: can you put 6m up on monday when we go through the turn just for a week or so? ... you did say you'd try to help me out!"

<u>Deutsche Bank [Adolph]</u>: yes have eno fixing untill 06/07 so i can

<u>UBS [Hayes]</u>: thanks mate³¹⁵

June 26, 2009:

<u>UBS [Hayes]</u>: i need you to move 6m up for 2 weeks mate ... but please move 6m up on monday.

Deutsche Bank [Adolph]: understood

UBS [Hayes]: thx i need you in the panel on Monday

Deutsche Bank [Adolph]: ok enough³¹⁶

675. On the day of the fixing, June 29, 2009, Hayes made one final push to manipulate higher the six-month Yen-LIBOR fixing. He confirmed his expectations of a high submission with Deutsche Bank's Yen-LIBOR submitter Guillaume Adolph and UBS' trader-submitter Rolf

³¹⁴ Ex. A-2 at 30-31.

³¹⁵ *Id.* at 31.

³¹⁶ *Id*.

Keiser, emphasizing that UBS stood to make "2m usda bp fix," *i.e.*, \$2 million per basis point that six-month Yen-LIBOR was manipulated:

June 29, 2009:

<u>UBS [Hayes]</u>: hi 6m cash crosses the year end today we have huge fixings

UBS [Keiser]: indeed

<u>UBS [Hayes]</u>: can we set 6m libor high pls? ...

UBS [Keiser]: we dont have any fix at mom

<u>UBS [Hayes]</u>: can we go 74 or 75? **we have 2m usda bp** fix for the next week i think a lot of people are going to move it up today well i hope

<u>UBS [Keiser]</u>: yes sure will. i go with 0. 75 for you.³¹⁷

June 29, 2009:

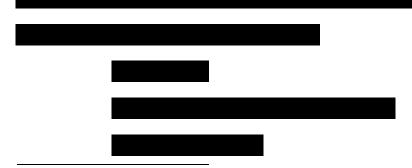
<u>UBS [Hayes]</u>: pls remember 6m today ...

Deutsche Bank [Adolph]: yah no worries ... 6m libor today good contrib?

<u>UBS [Hayes]</u>: high pls as high as you can manage we are going 75 anyway whatever you can do thx.

Deutsche Bank [Adolph]: sure np³¹⁸

676.



³¹⁷ *Id.* at 31-32.

³¹⁸ *Id*. at 32.





677. The Turn Campaign was successful. On June 29, 2009, UBS increased its sixmonth Yen-LIBOR submission three basis points from 0.72 to 0.75 and Deutsche Bank increased its submission by six basis points, from 0.65 to 0.71. In addition, five other Contributor Bank Defendants, all of which Hayes and Terry Farr discussed in the conversation above also increased their six month Yen-LIBOR submissions:

³²⁰ *Id.* at 249-250.

Comparison of Six-Month Yen-LIBOR Submissions								

678. As a result of Defendants' concerted manipulation, six-month Yen-LIBOR increased by three quarters of a basis point on June 29, 2009. By Hayes' own calculation, UBS made \$1.75 million in profit as a result of Defendants' manipulative conduct on this day.

iv. Operation 6M

- 679. During the Turn Campaign, Hayes began his second effort to push six month Yen-LIBOR high after June 2009, in an effort he dubbed, "Operation 6M." Operation 6M was Hayes' campaign to manipulate the six-month Yen-LIBOR fixing upward over several weeks through July, and then to cause the six-month Yen-LIBOR fixing to drop dramatically in mid-August. Hayes also remained focused on the Euroyen TIBOR fixing, which would impact his Euroyen-based derivatives positions.
- 680. The motivation for this effort was clear. If Hayes was successful in causing an increase to the six-month Yen-LIBOR between the end of July and then a drop in the fixing in mid-August, the UBS Yen Desk stood to gain hundreds of millions of dollars.
- 681. As with the Turn Campaign, Hayes' key contacts at certain brokerages and his friend, Deutsche Bank Yen-LIBOR submitter Guillaume Adolph, were critical to his plan. Hayes emphasized that he was trying to benefit his Euroyen-based derivatives positions while simultaneously managing the massive amount of risk created by his position, something UBS was very concerned about.

682. The following are examples of the communications surrounding the beginning of Operation 6m in late June and July.

June 24, 2009: (Emphasis added.)

ICAP [Read]: Morning [Tom], Rbs must have had some fixings, not helping

<u>UBS [Hayes]</u>: he on drugs for once i just want them static and they are falling! ... pls try to keep ly low on screen mate yeah i just need thgis 6m gap for 2weeks

ICAP [Read]: will do my best mate

<u>UBS [Hayes]</u>: then they can all go down hopefully tibor will stay high **operation 6m**.

ICAP [Read]: ;-)³²¹

June 26, 2009:

<u>UBS [Hayes]</u>: basically I will help you in 2 weeks time...I am the same way

Deutsche Bank [Adolph]: Perfect

<u>UBS [Hayes]</u>: But for the next 2weeks i really really need you to put 6m higher

Deutsche Bank [Adolph]: what is the date just that i know?

UBS [Hayes]: july 14

<u>Deutsche Bank [Adolph]</u>: Ok having a look

<u>UBS [Hayes]</u>: after that i need 6m to crash off like you.

<u>Deutsche Bank [Adolph]</u>: that is no problem for me, i do nothing with the cash guys until then

UBS [Hayes]: I need you to move 6m up for 2 weeks mate

<u>Deutsche Bank [Adolph]</u>: But after urs please

<u>UBS [Hayes]</u>: i will then get our 6m way down after july 18th it is

<u>Deutsche Bank [Adolph]</u>: ok

³²¹ Ex. C-1 at 31.

<u>UBS [Hayes]</u>: and will try to get everyone else down too

<u>Deutsche Bank [Adolph]</u>: when is the lest fixing date? ... the last july fixing date??"

<u>UBS [Hayes]</u>: 18th ... then i a need low low low ... sry 17th ... i happy for all libors off after that date ... only reason ion bid is i have huge huge position that way so am happy for to come lower after the 17th"

Deutsche Bank [Adolph]: ok enough enough 322

July 1, 2009:

<u>UBS [Hayes]</u>: hi are we planning on moving libors or just going unch?

<u>UBS [Keiser]</u>: i would have gone slightly lower in 6s but if you wish i can leave it unchanged

<u>UBS [Hayes]</u>: thx really need it unch for next 2wk then low as you want

<u>UBS [Keiser]</u>: ok 0.71 unc

UBS [Hayes]: ta. 323

July 7, 2009:

³²² Ex. I-2 at 28.

³²³ Ex. A-2 at 34.

July 15, 2009:

<u>Tullett Prebon [Cryan]</u>: ha ha ok mate **i can see you as captain chaos** cash still looking a touch easier but nothing much going on arbi are starting to produce bids so hopefully the offers may go back

324

<u>UBS [Hayes]:</u> ok i only need 6m high this month then you MUST get it lower a lot lower pls keep 3m and 1m unch."

<u>Tullett Prebon [Cryan]</u>: ok³²⁵

683. Avoiding Conflict with Guillaume Adolph's Interests. During Operation 6m (and at other times), Hayes offered to enter into trades with Deutsche Bank's Yen-LIBOR submitter Guillaume Adolph to ensure that their respective interests aligned and Adolph would not have a conflict that prevented him from helping Hayes with manipulating Yen-LIBOR. Hayes offered similar offsetting trades to UBS Trader-Submitters when their positions stood to be negatively impacted by a manipulation that favored Hayes. See ¶¶ 654-55, supra. For example, in the chat below, Hayes urged Adolph: "tell me what you need to see. i have a vested interest in making sure our fixings match."

June 26, 2009:

<u>Deutsche Bank [Adolph]</u>: on my fra switch it is your best?

<u>UBS [Hayes]</u>: **tell me what you need to see i have a vested interest in making sure our fixings match** just don't rip me off too much i had those round mid i got to go soon

Deutsche Bank [Adolph]: ok -1.5 and -1 ami asking too much?

UBS [Hayes]: thats fine³²⁶

32

³²⁵ Ex. A-2 at 34.

326 Ex. I-2 at 28.

684. As he was so concerned that Deutsche Bank not make a competing submission, Hayes offered such trades even at prices that were not beneficial to him to entice Adolph, and the latter often accepted. For example on July 21, 2009, Hayes outlined his plan, the size of his positions, the need to reduce his risk and how Adolph could benefit from an attractive trade:

July 21, 2009

UBS [Hayes]: i been asked to reduce risk a bit

Deutsche Bank [Adolph]: ok

<u>UBS [Hayes]</u>: i still going for lower 6m next month but position is huge if you want to do some 1y 1/t 1 wid help me on risk limits obviously i am still very much paid and need a low 6m from next week

Deutsche Bank [Adolph]: me paying 1 in 1 y?

<u>UBS [Hayes]</u>: y i don't want to do it but risk are going nuts position is v v big i told them already 6m will be lower next month problem is all my 6m fixes this month rolled and i am left too 1 way completely up to you if not i'll give some 3m 1/t.

<u>Deutsche Bank [Adolph]</u>: does not suit me taht much today need high 6m libor today

<u>UBS [Hayes]</u>: same **how about we do Ov6 spot as well? so no fix today i just need to keep the risk guys at bay 200b ly will bring me in limit i will pay you .665 for Ov6 today in same amount to knock the fix out if you need I think it does nothing today the fix that is wid be a massive favour ... if you do 200b 1y then what net fix are you left with? i will hedge the balance so you are neutral**

<u>Deutsche Bank [Adolph]</u>: can i do 200 and lower my 6m quote? oor we cross fra up to you mate"

UBS [Hayes]: rahter just cross the fra pls

Deutsche Bank [Adolph]: that is fair ok we done

UBS [Hayes]: thanks³²⁷

³²⁷ Ex. A-2 at 35.

The Last Phase of Operation 6M. As Operation 6M moved from the end of July 2009, Hayes shifted his efforts from increasing the six-month Yen-LIBOR higher, to ensuring that the fixing would be lower, financially benefiting his Euroyen-based derivative positions that were due to reset in mid-August 2009. Hayes coordinated artificially lower six-month Yen-LIBOR submissions at least two weeks in advance with UBS, Deutsche Bank, and HSBC, as indicated in the message to Deutsche Bank Yen-LIBOR submitter Guillaume Adolph below:

July 14, 2009:

<u>UBS [Hayes]</u>: just fyg [for your guide] after eom [end of month] will get 6m down a lot. we will move from top to bottom and so will [HSBC]³²⁸

686. ICAP's Darrell Read advised the Hayes to be careful with his efforts and to avoid changes in the rate that were too obvious. Hayes assured Read not to worry, and explained that he would stagger false submissions with HSBC and Deutsche Bank to avoid detection:

July 22, 2009

<u>UBS [Hayes]</u>: 11th aug is the big date i still have lots of 6m fixings till the l0th

ICAP [Read]: christ keeps getting extended started off as 14th of this month:-)

UBS [Hayes]: i know

ICAP [Read]: if you drop your 6m dramatically on the 11th mate, it will look v fishy, especially if HSBC and Deutsche Bank go with you I'd be v careful how you play it, there might be cause for a drop as you cross into a new month but a couple of weeks in might get people questioning you

<u>UBS [Hayes]</u>: don't worry will stagger the drops ie 5bp then 5bp

ICAP [Read]: ok mate, don't want you getting into sh it

<u>UBS [Hayes]</u>: us then [Deutsche Bank] then [HSBC] then us then [Deutsche Bank] then [HSBC]

³²⁸ *Id.* at 34.

ICAP [Read]: great the plan is hatched and sounds sensible 329

687. Hayes discussed the same plan to stagger drops in six-month Yen-LIBOR submissions with With Tullett Prebon broker Noel Cryan:

July 27, 2009

<u>UBS [Hayes]</u> speaking to Tullett Prebon [Cryan]: just trying on their August 11th. All right, I really need a big push. I don't want threes and ones to move. I just want sixes. On the, August 11th I need to start going down. What will help is we'll move, HSBC will move, West LB will move a big push

688. In July 2009, the Yen-LIBOR submissions of UBS and Deutsche Bank both moved higher consistent with Operation 6M. When Hayes and Adolph were not in the office, they communicated with their BlackBerry mobile phones to coordinate Operation 6M. In the following electronic chat, Hayes and Adolph ensured that Operation 6M would continue when Hayes was out of UBS's Tokyo office for the month of August:

July 23, 2009:

UBS [Hayes]: ok we need to coordinate the 6m drop when do you need it falling?

Deutsche Bank [Adolph]: whenever

<u>UBS [Hayes]</u>: ok we need aug 11th you are back by then? if you need earlier let me know i am going to be away the whole of august almost if you need anything i am in london and zurich offices oon blackberry _____@ubs.com will be pushinh lower 6m from aug 11th

Deutsche Bank [Adolph]: back on the 10th in ldn³³⁰

UBS [Hayes]: ok well lets sort 6m out from 11th will make a massive push

689. Adolph followed through on his promise to Hayes, lowering Deutsche Bank's sixmonth Yen-LIBOR submissions drastically. He also informed other co-conspirators, telling

³²⁹ *Id.* at 36.

³³⁰ Ex. I-2 at 29.

Trader K-2 from Firm K that "between u and me 6m libor is going to go very low in sep" and "[Hayes] will drop and teh others when back from holiday."

- 690. In August 2009, the submissions of all three banks, UBS, Deutsche Bank, and HSBC all moved lower consistent with the plan. By August 11, 2009, the day of Hayes' desired drop in the fixing, the submissions of all three banks dropped, such that HSBC and Deutsche Bank were in the bottom quartile of the submitting banks while UBS was included in the fix calculation. Specifically, from late July 2009 through mid-August 2009, UBS' submission fell 12 basis points, HSBC's and Deutsche Bank's submissions fell by 14 and 15 basis points, respectively. In contrast, the largest change in any other submitting bank's submission during this time was a drop of eight basis points and the average change among the other thirteen banks was a decrease of about four basis points.
 - J. The Contributor Bank and Broker Defendants Knew That Other Contributor Bank Defendants Were Manipulating Yen-LIBOR, Euroyen TIBOR and the Prices of Euroyen-Based Derivatives.
- 691. As early as February 2, 2007, RBS "Trader-3," Will Hall, knew that Tom Hayes communicated with another Contributor Panel "Bank-A," JPMorgan, as part of Hayes' efforts to manipulate Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives. As a result of UBS' collusion with unidentified JPMorgan, RBS also knew that UBS had kept three-month Yen-LIBOR "artificially high." This provided RBS "useful" insight into the artificial direction of the manipulation and thus a key informational advantage, *i.e.*, knowing the "artificial[]" trend in the three-month Yen-LIBOR, over other Euroyen market participants. *See* ¶ 541-42, *supra*.
- 692. RBS Yen traders also knew that they were engaging in wrongful conduct and that Yen-LIBOR was being manipulated to benefit Euroyen-based derivative positions throughout the market. As the Senior Yen Trader Jimmy Tan, Yen Manager, and other Yen traders coordinated

their requests for beneficial Yen-LIBOR submissions with the Primary Submitter Paul White, they discussed at times how the Yen-LIBOR panel was a "cartel" in which rates were being "manipulated." RBS traders, including Tan, also discussed how Hayes was manipulating Yen-LIBOR, including by coordinating with the "cash guys" at other Contributor Bank Defendants. Examples of such communications include the following:

August 20, 2007:

Yen Manager: it seems to be [UBS] is pushing for these [Yen] libors partnering up with number of cash guys as well [...]

Yen Trader 2: yeah [UBS Yen Trader] all over it

August 20, 2007:

RBS [Tan]: this libor setting is getting nutss [...]

<u>Bank A Trader</u>: im puzzled as to why 3m libor fixing not coming off after the FED action [...]

<u>Bank B Trader</u>: [UBS] is lending dolls through my currencies in 3 month do usee him doing the same in urs [...]

RBS [Tan]: yes[,] he always led usd in my mkt[,] the Yen-LIBOR is a cartel now [...]

RBS [Tan]: its just amazing how libor fixing can make you that much money [\dots]

<u>RBS [Tan]</u>: [...] its a cartel now in london[.] they smack all the 1yr irs .. and fix it very high or low [.] they smack all the 1yr irs .. and fix it very high or low

693. Former Rabobank traders and submitters also recognized that Yen-LIBOR was "definite[ly] manipulate[ed]" throughout the market. For example, on July 7, 2009, Rabobank "Trader-5," Takayuki Yagami, shared his impressions with "Submitter-4," Paul Robson, that "some ppl are talking with each other" to artificially lower the three-month Yen-LIBOR. Not surprised by Yagami's impressions, Robson commented that Yen-LIBOR was manipulated, and

in fact "always" is manipulated. Robson continued to explain that he too "always used to ask if anyone needed a favour and vise versa," recognizing that although this was "unethical" it "always helpd to have fireind [friend] in [the] mrkt."

- K. As Sophisticated Market Participants, the Contributor Bank and Broker
 Defendants Knew Their Manipulation of Yen-LIBOR, Euroyen TIBOR and the
 Prices of Euroyen-Based Derivatives Would Have (And Did Have) Adverse
 Financial Consequences on Other Euroyen-Based Derivatives Market
 Participants
- well aware of the basic features of Euroyen-based derivatives, including Yen-LIBOR based interest rate swaps and foreign exchange forwards. *See e.g.*, ¶ 200, *supra* (CFTC finding that RBS and Rabobank traders knew interest rate swaps and foreign exchange forwards were priced based on Yen-LIBOR and traded those Euroyen-based derivatives for profit). Accordingly, Defendants understood that to the extent they increased their profits or decreased their losses in certain transactions from their manipulation of Yen-LIBOR and/or Euroyen TIBOR, other market participants would suffer corresponding losses.
- 695. For example, from as early as May 2006 and continuing at least through October 2008, Rabobank Yen-LIBOR submitter Paul Robson and Lloyds trader Andy Doe had an agreement that they would, upon request, contribute Yen-LIBOR submissions to benefit each other's Euroyen-based derivative positions, or the Euroyen-based derivative positions of other traders. *See* ¶¶ 590-603, *supra*. Communications between Doe and Robson demonstrate that they knew their manipulative conduct, which financially benefited Rabobank and Lloyds Euroyen-based derivatives positions, was harming their "poor customers" who suffered a corresponding monetary loss. *See* ¶ 598, *supra*.
- 696. Robson and Rabobank trader Takayuki Yagami further admitted that they understood that American financial institutions would be negatively impacted by their Yen-

LIBOR manipulation.³³¹ For example, during his plea allocution, where he admitted to conspiracy to commit wire fraud and bank fraud charges, Robson explained:

I tailored the yen LIBOR submissions I made on behalf of Rabobank in order to profit the bank's position . . . I understood the parties taking opposite trading positions could be negatively affected and I knew that some of these parties that could be affected were American financial institution...When I made these submissions designed to favor the bank's trading positions, I knew that it was wrong to do so. 332

697. Similarly, at Deutsche Bank, despite knowing what they were doing was illegal, its employees continued to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. In a 2008 phone call, Adolph told an unknown caller ("UC") that Hayes and UBS were manipulating Yen-LIBOR lower, along with the help of at least eight other banks. Because Hayes was coming up on a large reset date for his Euroyen-based derivatives positions, he told Adolph that each decrease in a basis point would be worth approximately 75 million Yen (roughly \$750,000) for his trading book. Upon telling the UC this information, Adolph confirmed that these actions were illegal, stating:

<u>Deutsche Bank [Adolph]</u>: Um...it was not...not that big movement in the cash and [UBS] is manipulating it at the moment to get it very low.

<u>UC</u>: You are telling me that the [UBS] is manipulating right?

<u>Deutsche Bank [Adolph]</u>: Yeah. I mean yesterday [Hayes] came to me, ok, and said "hello mate," "hello," "I've got a big reset, that was yesterday, and about 750, uh…75 million yen dv01,³³³ can you put it low?"

³³¹ United States v. Robson, No. 14-cr-272, ECF No. 21 (Sept. 2, 2014); United States v. Yagami, No. 14-cr-272, ECF No. 16 (Jul. 1, 2014).

³³² United States v. Robson, No. 14-cr-272, ECF No. 21 at 12-13 (Sept. 2, 2014).

³³³ This refers to Hayes' "delta," or the impact on Hayes' portfolio resulting from a one basis point change in Yen-LIBOR.

<u>Deutsche Bank [Adolph]</u>: And [Hayes] said, 'can you put it low?' I said, 'yeah, ok.' At the end...at the end of the day, [laughter] it went down [unintelligible] bps when I think cash is better bid.

<u>UC</u>: Fucking hell.

<u>Deutsche Bank [Adolph]</u>: And he's doing that with the 16 banks [laughter].

<u>UC</u>: That means [UBS] is asking 16 banks to...to ...to ask you guys to put it high.

<u>Deutsche Bank [Adolph]</u>: Maybe not…not 16 banks, but you know, if he knows eight banks, that's enough.

<u>Deutsche Bank [Adolph]</u>: Yeah this is why the LIBOR came off yesterday. For no other reason.

<u>Deutsche Bank [Adolph]</u>: Yeah, yeah, I know, but...because it was manipulated by Hayes

UC: Fucking hell, manipulating, Wow!

<u>UC</u>: Is that...is that legal or illegal?

<u>Deutsche Bank [Adolph]</u>: No, that's illegal. No, that's illegal....

698. Again, in a September 30, 2008 electronic chat, Adolph acknowledged that manipulating Yen-LIBOR and Euroyen TIBOR was wrong. Adolph told Deutsche Bank Submitter-8 that ten days prior Hayes, "call[ed] [Adolph] directly to beg [him] to put a low 6m libor." Submitter-8 replied, "you're kidding me??????" and stated "that's not very kosher" Adolph replied, "no, not really." Despite knowing that manipulating Yen-LIBOR and Euroyen TIBOR was illegal, Adolph continued to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives products through at least 2010.

- L. <u>Defendants Agreed to and Did Fix the Bid-Ask Spread on OTC Euroyen-Based Derivatives, Overcharging Class Members for Purchases and Underpaying Class Members for Sales of Such Derivatives.</u>
- 699. In addition to manipulating Yen-LIBOR and Euroyen TIBOR, Defendants also conspired to fix prices in the Euroyen-based derivatives market by artificially increasing the "bid-ask spread," *i.e.*, the difference between the "bid-price" at which Defendants offer to buy a Euroyen-based derivatives, and the "ask price" at which Defendants offer to sell the same Euroyen-based derivatives.
- 700. On March 2, 2012, COMCO, the Swiss competition regulator, announced it had uncovered evidence that at least twelve banks, including UBS, Credit Suisse, Bank of Tokyo-Mitsubishi, Citibank, Deutsche Bank, HSBC, JPMorgan, Mizuho, Rabobank, RBS, Société Générale, and Sumitomo Mitsui, in concert with other "financial intermediaries" had not only manipulated Yen-LIBOR and Euroyen TIBOR, but also "colluded to manipulate the difference between the ask price and bid price (spread) of derivatives based on these reference rates." 334
- 701. As market makers who both buy and sell Euroyen-based derivatives, Defendants, in a scheme akin to the NASDAQ market markers bid-ask cartel, ³³⁵ profit from a wider bid-ask spread, because it allows them to buy Euroyen-based derivatives from Plaintiffs and Class members at an artificially lower bid price and resell them to Plaintiffs and Class members at an artificially higher ask price. Thus, Defendants reap supracompetitive profits on both sides of every transaction, saving money when they purchase Euroyen-based derivatives for less than they should have, and making money when they resell them for an artificially inflated price.

³³⁴ COMCO opens investigation against banks, THE SWISS COMPETITION COMMISSION (Mar. 2, 2012), available at http://www.news.admin.ch/NSBSubscriber/message/attachments/25724.pdf.

³³⁵ In re NASDAQ Market-Makers Antitrust Litigation, 895 F. Supp. 703 (S.D.N.Y. 1995) (upholding claim for agreement to fix prices against market makers who widened the bid-ask spread).

702. This anticompetitive combination of at least twelve Defendants, including UBS, which accounted for approximately 40% of the Euroyen-based derivatives market on its own, directly harmed competition in the U.S. market for Euroyen-based derivatives. Trillions of dollars of Euroyen-based derivatives were traded within the United States during the Class Period, including by the twelve Defendants identified in the COMCO announcement. *See e.g.*, ¶ 163, *supra*. As a result, by fixing an artificially wider bid-ask spread, Defendants caused injury to Plaintiffs and the Class, who were overcharged and/or underpaid in their U.S.-based transactions for Euroyen-based derivatives.

M. <u>Beginning in at Least 2009, the Euroyen TIBOR Contributor Bank Defendants</u> Conspired to Manipulate Euroyen TIBOR Higher Than Yen-LIBOR

703. Staring in at least 2009, the Euroyen TIBOR Contributor Bank Defendants conspired to manipulate Euroyen TIBOR artificially higher to earn illegitimate profits on loans based on that rate.

704. In 2013, Hideto "Eddy" Takata, a former Tokyo-based money markets trader at Deutsche Bank and Barclays, published a book about the Yen-LIBOR and Euroyen TIBOR manipulation called *The Manipulation of the LIBOR Fixing and the Doubt Over the Artificial TIBOR Fixing*. Takata's book explained how while most Japanese banks borrow Yen at Yen-LIBOR rates, within Japan the rate charged on most loans, including mortgages, is based on Euroyen TIBOR. To capitalize on this, Japanese banks on the Euroyen TIBOR panel conspired to manipulate Euroyen TIBOR artificially higher than Yen-LIBOR since at least 2009. Because these banks could borrow Yen at the lower Yen-LIBOR rate and lend within Japan at

³³⁶ See Hideto "Eddy" Takata, The Manipulation of the LIBOR Fixing, and the Doubt Over the Artificial TIBOR Fixing, Gentosha Renaissance, Inc. (Feb. 20, 2013).

³³⁷ See Ben McLannahan, Japanese Banks Accused of TIBOR Fixing, FINANCIAL TIMES (Feb. 6, 2013) http://www.ft.com/intl/cms/s/0/792d5b58-7010-11e2-8785-00144feab49a.html#axzz3tfJE4YgR.

the artificially higher Euroyen TIBOR rate, the Euroyen TIBOR Contributor Bank Defendants generated increased profits from their loan portfolios by keeping the "spread" or difference between Yen-LIBOR and Euroyen TIBOR as profit.

705. The manipulative conduct described in Takata's book is consistent with Plaintiffs' economic analysis, which shows that the spread between Yen-LIBOR and Euroyen TIBOR became positive, *i.e.*, Euroyen TIBOR was higher than Yen-LIBOR, beginning on January 15, 2009. *See* ¶ 890, *infra*. From January 15, 2009 through the end of the Class Period, the average spread between Yen-LIBOR and Euroyen TIBOR was 0.137, 470% higher than the historical spread of 0.024 that existed before the start of the Class Period. *Id.* Because Yen-LIBOR and Euroyen TIBOR should be equally affected by important market and financial fundamentals, including *inter alia* changes in monetary policy and market risk, the significant deviation from the historical pre-Class Period relationship between Yen-LIBOR and Euroyen TIBOR observed in 2009 is indicative of manipulative conduct.

706. This artificially wider positive spread between Yen-LIBOR and Euroyen TIBOR is also confirmed by independent economic analysis. A 2014 study of market transactions tracked by the Association of Call Loan and Discount Companies found "gaps between Tibor rates and rates in actual interbank transactions," noting that the average market rate charged in transactions for three-month funds was significantly lower than three-month Euroyen TIBOR over the same period. 338

707. As further evidence that the large positive spread between Yen-LIBOR and Euroyen TIBOR was caused by manipulative conduct, the same analysis found that the "gap" between Yen-LIBOR and Euroyen TIBOR "narrowed sharply in the first three months of 2013,

³³⁸ See Ben McLannahan, *Japan's Tibor Rate Comes Under Scrutiny*, Financial Times (May 19, 2014), http://www.ft.com/intl/cms/s/0/9a2e06a0-df26-11e3-86a4-00144feabdc0.html#axzz3tfJE4YgR.

as criminal probes gathered pace in the US, and as Eddy Takata...alleged that Japanese banks were conspiring to keep Tibor rate higher than they should be."³³⁹

708. The Euroyen TIBOR Contributor Bank Defendants' agreement to manipulate Euroyen TIBOR artificially higher since at least 2009, caused the prices of Euroyen-based derivatives to be artificial during the Class Period. As a result, Plaintiffs and Class Members were damaged and suffered legal injury when they transacted in Euroyen-based derivatives at artificial prices that were proximately caused by Defendants' manipulative conduct.

N. <u>Defendants Concocted False Stories They Could Give in the Event Someone</u>
<u>Questioned Their Manipulation of Yen-LIBOR, Euroyen TIBOR, and the Prices</u>
of Euroyen-Based Derivatives

1. RBS

709. The Senior Yen Trader Jimmy Tan and other RBS Yen traders knew that they could impact the fixing of the daily Yen-LIBOR and were aware that RBS' Yen-LIBOR submissions could be questioned by the BBA. In the following example, Tan boasted about how RBS succeeded in moving six-month Yen-LIBOR and then discussed what false story they could tell to the BBA to justify the low submission if necessary:

April 2, 2008:

RBS [Tan]: nice [Yen] libor[.] our 6m fixing move the entire fixing[.] hahahah

RBS [Danziger]: the BBA called to ask me about that today

RBS [Tan]: really?

RBS [Danziger]: yes –

RBS [Tan]: they complain?

RBS [Danziger]: asked to speak to me about the low 6m rate

RBS [Danziger]: no[,] just to make sure i was happy with it [...]

RBS [Tan]: i think some banks must have complain

³³⁹ *Id*.

<u>RBS [Danziger]</u>: he called b4 any of the other banks saw our data[,] at about 11.15[,] to check it was ok

RBS [Tan]: oh then its fine

RBS [Danziger]: before publishing

RBS [Tan]: i am sure some HF [hedge fund] will complain tomorrow .. tough

RBS [Danziger]: tough

<u>RBS [Tan]</u>: we will say we lower every tenor .. 1m 3m 6m .. we feel rbs name has very good credit .. no problem getting money in

RBS [Tan]: good way to boost share price!

RBS [Tan]: our 3m libor is at top end ... 6m at bottom end ... just the ideal level!

2. Deutsche Bank

710. To conceal its wrongdoing, Deutsche Bank repeatedly lied to the FCA during its probe into Deutsche Bank's LIBOR-related misconduct. The FCA's Final Notice against Deutsche Bank details how the bank attempted to hide the Federal Financial Supervisory Authority for Germany's ("BaFin") findings from their LIBOR probe. In 2012, BaFin reviewed Deutsche Bank's LIBOR misconduct, producing a report ("The Report") to the bank in August of 2013. 340 Deutsche Bank was unhappy with The Report, which heavily criticized the bank. 341

711. In the course of its investigation, the FCA requested that Deutsche Bank provide it a copy of The Report.³⁴² Deutsche Bank's Senior Management, concerned about disclosing both The Report and BaFin's findings, sought the advice of counsel.³⁴³ Deutsche Bank's lawyers informed them that a failure to disclose The Report would constitute a breach of FCA

³⁴⁰ Ex. I-3 at 26.

³⁴¹ *Id* at 27.

³⁴² *Id*.

³⁴³ *Id.* at 26.

Principle 11, which broadly covers providing false, misleading or inaccurate information to the FCA, including during an investigation.³⁴⁴

- 712. Disregarding this advice, Deutsche Bank went on a campaign to suppress The Report. In September 2013, Deutsche Bank's Senior Manager F met with BaFin and expressed concern regarding disclosure of The Report. The BaFin took no position, meaning Deutsche Bank was free to provide the report to FCA.
- 713. After the BaFin meeting, on September 6, 2013, Senior Manager F talked to Senior Manager G via telephone. Together, Senior Managers F and G scripted a fabricated response, which they agreed to follow if the FCA asked Deutsche Bank to produce The Report in the future. The script read as follows:
 - ... the BaFin has explicitly stated to DB that it would not approve of DB sharing either copies or details of the contents of the aforementioned documents [including the report] with foreign regulators at this stage.³⁴⁵
- 714. To provide further cover for Deutsche Bank's actions and support the scripted response above, Senior Manager F met with Legal Manager A later that same day to draft an "attendance note" about the BaFin meeting. The note was intentionally ambiguous and written so that it could be interpreted to state that the BaFin expressly prohibited Deutsche Bank from disclosing The Report to the FCA. Conveniently, this ambiguous document was the only record of the September BaFin meeting.
- 715. All the while, Deutsche Bank's management knew that disclosing The Report was not prohibited by BaFin. For example, in a September 10 email, a Deutsche Bank Legal Team member wrote that "subject to the [Management] Board agreeing, we would likely inform the

³⁴⁴ *Id*. at 27.

³⁴⁵ *Id.* (alteration in original).

other regulators about receipt of the [Report and the other materials] but only be prepared to share the [Report]."³⁴⁶ This statement was also reflected in papers sent to the management board during a meeting which stated that disclosure of The Report "may be acceptable for the BaFin."

716. Despite being told by its legal department to disclose The Report to the FCA,
Deutsche Bank's management deliberately chose to conceal BaFin's criticisms against the bank.
On September 13, 2013, Deutsche Bank conveyed the previously-scripted statement to the
FCA's Enforcement and Financial Crime Division. On September 16, Senior Manager E told the
FCA's Supervision Department the same message during a phone call. Deutsche Bank also
followed-up via email on September 16, stating to the FCA:

DB received several documents from the BaFin in August 2013 including [the Report]... The BaFin has indicated to DB that it would not approve of DB sharing either copies or details of the contents of the documents referred to above with foreign regulators at this stage. In these circumstances, the Bank feels that it has no option but to defer to the BaFin's wishes. As discussed, if you would like further information, we would therefore ask that you speak directly with your contacts at the BaFin.³⁴⁷

- 717. Collectively, the information Deutsche Bank told the FCA was inaccurate, misleading, and intentionally crafted to keep the FCA from discovering the criticisms of the bank, including The Report, that senior management considered unflattering.
- 718. On January 30, 2014, the FCA began to investigate Deutsche Bank for its failure to disclose The Report. Deutsche Bank continued to make misrepresentations to the FCA to cover-up its LIBOR-related misconduct. Deutsche Bank Senior Manager H represented to the FCA that the attendance note of the September meeting with BaFin substantiated the bank's position that their non-disclosure was reliable and appropriate. Senior Manager H later

³⁴⁶ *Id.* at 28 (alterations in original).

³⁴⁷ *Id.* (emphasis added).

determined that the attendance note was misleading, but did not contact the FCA to correct his misleading statement. The FCA determined that the attendance note was drafted by Legal Manager A two days after the September meeting, at which he was not present.³⁴⁸

719. To further conceal its LIBOR-related misconduct, members of Deutsche Bank's compliance department repeatedly refused to conduct internal audits of its LIBOR submission process. For example, on October 25, 2010, a Deutsche Bank Compliance Supervisor asked Compliance Officer A to look into the bank's LIBOR-related systems and control to formally review the banks' practices in multiple currencies. Upon information and belief, "Compliance Officer A" is Andrew Sowter, Deutsche Bank's Head of Compliance Asia Pacific and the Global Head of Global Banking Compliance. Compliance Officer A ignored this request and did not conduct the review because it would negatively impact Deutsche Bank's highly profitable LIBOR-based derivatives business, explaining to another Deutsche Bank employee that he thought the Compliance Supervisor's idea of reviewing the LIBOR submission process was "crazy" and that "the business is going to go completely mental" if any kind of audit ever takes place.

720. Later that same year, Compliance Officer A struck again, this time in response to a December 2010 request from the BBA that Deutsche Bank conduct an internal audit of its LIBOR submission process. Rather than simply conduct the review, Compliance Officer A signed and submitted a confirmation to the BBA on January 12, 2011, stating that Deutsche

³⁴⁸ *Id.* at 29.

³⁴⁹ Ex. I-3 at 23.

³⁵⁰ Plaintiff believes this to be true from comparing Ex. I-3 at 30 and the Ex. I-6 at 14. According to Ex. I-3, "Compliance Officer A" prepared an attestation for the FCA pertaining to Deutsche Bank's systems and controls in place for its LIBOR submissions process after a request from the FCA on February 4, 2011. Similarly, Ex. I-6 states that on February 4, 2011, the FCA requested a confirmation of Deutsche Bank's LIBOR systems and controls, to which Mr. Andrew Sowter issued an incorrect written confirmation.

³⁵¹ Ex. I-3 at 23.

Bank's LIBOR submissions had already been audited. This was a lie. Deutsche Bank's compliance did not audit the systems and controls in place for LIBOR. Compliance Officer A further dismissed the BBA's request and his fraudulent statement in an email, stating that the signed confirmation form was nothing more than "an arse-covering exercise [by the BBA]."

- 721. Following the BBA's request, on February 4, 2011, the FCA requested that

 Deutsche Bank attest to the systems and controls in place to ensure the integrity of Deutsche

 Bank's LIBOR submission process. Once again, the task of completing this review fell on

 Compliance Officer A, who conducted only a minimal investigation into Deutsche Bank's

 LIBOR submission process. Compliance Officer A found that there were **no LIBOR-specific systems and controls** in place to ensure the integrity of the benchmark. He also found that

 Deutsche Bank's communication monitoring system would not detect any LIBOR-related "buzz words" indicative of manipulative conduct and/or inter-bank coordination. 352
- 722. Despite these findings, on March 18, 2011, Compliance Officer A provided an attestation to Senior Manager I, who signed and returned the following statement to the FCA:

DB monitors all email and instant messaging communications of all front office staff. The focus of this surveillance is DB's market conduct, such that key words and phrases within the monitoring tool are designed to flag potential market conduct issues. Any potential issues can be escalated and investigated as necessary. In light of the above, I consider, together with the senior management [names of Senior Manager B and Senior Manager C provided] . . . that DB currently has adequate systems and controls in place for the determination and submission of DB's LIBOR fixings. 353

723. This statement was blatantly false in three respects, as Compliance Officer A knew that Deutsche Bank: (1) did not have any specific procedure in place governing LIBOR submissions; (2) did not conduct spot checks; and (3) did not monitor communications for

³⁵² *Id.* at 30.

³⁵³ *Id.* at 30-31.

LIBOR-specific terms. The FCA found that Deutsche Bank's senior management failed to oversee Compliance Officer A or verify any information contained within the attestation.³⁵⁴

724. In yet another failure to comply with a government regulator's request, Deutsche Bank destroyed possibly-relevant evidence after receiving a formal request from the FCA to preserve it. In May 2011, the FCA ordered that Deutsche Bank retain all LIBOR-related data and information, including telephone recordings, dated back through 2006. Hermann-Josef Lamberti, a member of Deutsche Bank's management board and Chief Operating Officer responsible for overseeing IT, did not properly warn his subordinates of the FCA order. As a result, in July 2012, Deutsche Bank destroyed audio recording of telephone calls relevant to the LIBOR investigation dating from 2008 to 2009.

3. Rabobank

725. To cover up its failure to implement internal LIBOR-related systems and controls, Rabobank filed a false attestation with the FCA. On February 2, 2011, the FCA asked Rabobank to "provide an attestation as to the adequacy of the systems and controls arrangements currently in place for the determination and agreement of . . . LIBOR submissions." At that time, Rabobank had drafted a LIBOR policy, but did not implement it.

726. Despite not having any LIBOR-related systems and controls in place, Rabobank signed and returned an attestation to the FCA on March 18, 2011, stating: "As per your letter of 2nd February 2011, we can confirm that the arrangements in place for Rabobank International's LIBOR submissions are adequate and fit for purpose." This statement was false in three aspects, as Rabobank: (i) did not implement, disseminate, or even train its employees on any LIBOR-related systems and controls; (ii) continued to allow submitters to trade derivatives that were

³⁵⁴ *Id.* at 31.

³⁵⁵ Ex. D-3 at 16.

based on the very rate they were responsible for submitting; and (iii) failed to implement a system to maintain records of who was making LIBOR submissions and on what those submissions were based.³⁵⁶

- 727. After lying to the FCA, Rabobank put its flawed LIBOR policy in place on March 30, 2011, but given the policy's shortfalls, Rabobank's traders and submitters continued to manipulate LIBOR. It was not until over a year later, in August 2012, that Rabobank finally addressed the problem by putting systems and controls in place that prohibited LIBOR submitters from trading LIBOR-based derivatives products.³⁵⁷
- 728. Rabobank's failure to implement internal controls to address benchmark interest rate submissions, allowance of inappropriate communications between traders and Rabobank's submitters, and financial incentive to manipulate the rates amplified the pattern of misconduct, which continued for a number of years.
- 729. During the Allen/Conti Trial, it was revealed for the first time that Rabobank's employees also lied when interviewed by the FCA about their manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. Paul Robson testified that when the FCA interviewed him, he feared the possible criminal ramifications of his actions, so he lied to the authority to protect his interests:

<u>Government [Slipperly]</u>: Mr. Robson, you were asked quite a bit about your state of mind during cross-examination. Can you tell the jury about your state of mind when you were giving -- when you were interviewed by the FCA?

<u>Rabobank [Robson]</u>: I didn't really treat it with the gravity it deserved. I thought that if I could create enough bluster and

³⁵⁶ *Id*.

³⁵⁷ *Id*.

ambiguity around it, the whole affair then it would go away, so that's what I did."358

730. Robson also testified that his objective in lying to the FCA was "trying to create some doubt and confusion about what [they] were doing." Because Defendants told self-serving lies to government regulators to keep them from discovering the extent of their wrongdoing, Plaintiffs and the Class continue to learn new information about the means of Defendants' manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives, and the details of their conspiracy.

O. <u>Defendants Used Code Words to Conceal Their Manipulation of Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives</u>

- 1. ICAP Yen Brokers Used Code Words and Personal Cell Phones To Try and Conceal Their Yen-LIBOR Services
- 731. In late 2007 and early 2008, ICAP's Yen Desk Head Danny Wilkinson,
 Derivatives Broker 1 Darrell Read and Cash Broker 1 Colin Goodman became concerned that
 ICAP compliance might discover that they were aiding Hayes' manipulation of Yen-LIBOR and
 the prices of Euroyen-based derivatives. To conceal their unlawful activities, Read began
 communicating by personal mobile telephones and text messages with Goodman. Read also
 alerted Hayes about the need to be careful in their communications when explaining their
 "views":

November 1, 2007:

ICAP [READ]: HI MATE, JUST HAD [Danny Wilkinson] BACK ON RELIBORS, HAD A LOT OF COMPLIANCE PRESSURE RECENTLY DUE TO CREDIT PROBLEMS, WE BOTH NEED TO BE A LITTLE MORE SUBTLE IN OUR "VIEWS"...IE' I THINK THE FWDS ARE SUGGESTING THIS 6MOS LIBOR SHOULD BE LOWER...ETC. MY E-MAILS ETC. NEED TO BE WORDED MORE CAREFULLY

³⁵⁸ United States v. Allen, No. 14-cr-272, Testimony of Trial at 614 (Oct. 22, 2015).

³⁵⁹ Id. at 626-27.

732. In an effort to ensure that Hayes' requests escaped detection from review by ICAP's compliance staff, Read and Hayes started using code words to mask their discussions about manipulating LIBOR. Read and Hayes used the words "political correctness," "arbitrage," "arb" or "arbi" to denote requests and efforts to push Yen-LIBOR in a particular direction on Hayes' behalf. For example:

November 13, 2007:

<u>ICAP [Read]</u>: [to Colin Goodman] in these days of "political correctness" is it true that there is a fair bit of pressure holding 6 mos libor down today? I think this will probably suit.

January 28, 2008:

<u>ICAP [Read]</u>: [Colin] libors..sees 1m and 3m coming in unchanged ... 6m down 1/4bp....arbi has made him sent them out a bit higher,but not confident he'll get them up

February 21, 2008:

<u>UBS [Hayes]</u>: cu know what ineed arbitrage wise? you

<u>ICAP [Read]</u>: high 3m low 6m [Colin] reckons 1m could come off 1/2bp today (looks 1bp too high to him at the mom)....3m -1/8th.....6m -1/8th

UBS [Hayes]: ok lets hope the arby works!

<u>ICAP [Read]</u>: well he has sent the same as yesterday,but just warning us . .. when does your big 1m roll out?

2. R.P. Martin Brokers and Hayes Attempted to Conceal Their Improper Conduct Surrounding the Wash Trades

733. Hayes and R.P. Martin broker Terry Farr were well aware of the improper nature of their conduct. First, they made an effort to avoid any written communications confirming the wash trades, choosing primarily to communicate via telephone. For example, Hayes warned Farr not to put anything on chat:

December 3, 2008:

<u>UBS [Hayes]</u>: What I'm doing mate, don't fucking put it on chat.

R.P. Martin [Farr]: All right. Okay.

UBS [Hayes]: All right. Okay. 90 and three-eighths

R.P. Martin [Farr]: Oh, thank you very much, mate. I love you.

<u>UBS [Hayes]</u>: I just want it but don't put it on fucking chat, all right.



- P. After the Contributor Bank Defendants Were Placed on Notice of Government Investigations into the Manipulation of U.S. Dollar LIBOR, Defendants

 Continued to Manipulate Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives
- 735. Defendants continued their Euroyen manipulation long after authorities had launched investigations into false reporting and manipulation of U.S. Dollar LIBOR. By way of example, RBS traders and submitters acknowledged internally by at least September 2010 that regulators were investigating false reporting of U.S. Dollar LIBOR, but nonetheless agreed that they were going to continue to manipulate Yen-LIBOR. RBS traders and submitters, however, recognized that they should be more careful to cover their tracks to avoid detection, including

avoiding openly discussing in writing their manipulation of Euroyen while regulators were snooping around in U.S. Dollar LIBOR.

- 736. For example, in one exchange on September 24, 2010, Jimmy Tan contacted Neil Danziger and told him to ask Paul White "to push 6m [Yen] Libor up 2 bps to 44." Danziger responded: "ha . . . i will mention it ... no emails anymore" In another exchange, on November 22, 2010, Danziger and Jimmy Tan acknowledged that "at the moment the FED are all over us about USD libors," but because they didn't "think anyone cares [about] JPY libor," at least "not yet," they acknowledged they had the green light to continue with their Yen-LIBOR manipulation.
- 737. In another exchange on November 24, 2010, Paul White, RBS' primary submitter, warned Jimmy Tan to no longer put in writing his manipulative requests. The warning first appeared in writing when the submitter diverted an instant message request from Jimmy Tan for an artificial Yen-LIBOR rate by responding spontaneously with the off-topic-question of: "how you doing with all the volatilities these days?" *i.e.*, code to change the subject. Tan responded, "ok no prob....wouldn't want to cause any problem....thanks mate." Shortly after the instant message exchange, in a follow-up telephone conversation, Paul White was more blunt in his warning, saying "we're just not . . . allowed to have those conversations on [instant messages] . . . because of the BBA thing." After they had a good laugh about it, the White confirmed he was still on board with the manipulation, *i.e.*, submitting false Yen-LIBOR rates that financially benefitted Tan's Euroyen-based derivatives positions, saying: "So yeah, leave it with me, and uh, it won't be a problem." Jimmy Tan responded, "Ok, great."
- 738. The collusive manipulation in the Euroyen-based derivatives market had become so widespread that in Jimmy Tan's words, the banks setting Yen-LIBOR had become a "cartel."

739. UBS continued to engage in all of the manipulative conduct long after it was on notice that the CFTC was investigating UBS in connection with its U.S. Dollar LIBOR practices. UBS received a demand for documents and information from the CFTC's Division of Enforcement in October 2008, yet the conduct of the traders and submitters in relation to Euroyen (and other currencies), including collusive conduct, occurred well into 2010. The rampant misconduct across Yen-LIBOR, Euroyen TIBOR and other rates at UBS only came to light as a result of the CFTC's subsequent request in April 2010 that UBS conduct an internal investigation relating to its U.S. Dollar LIBOR practices. *See* Ex. A-2, p. 13.

Q. <u>Defendants Obstructed Government Investigations and Lied to Their Attorneys</u> during Their Own Internal Investigations of LIBOR Manipulation.

- 740. Defendants also sought to obstruct investigations into the manipulation of LIBOR. For example, in December 2010, a UBS derivatives desk manager instructed a UBS LIBOR Submitter to lie when interviewed by UBS attorneys during the investigation into LIBOR manipulation. Among other things, the UBS derivatives desk manager instructed the UBS Submitter to:
 - falsely claim that the UBS Yen trading desks did not have any derivative positions with exposure to Yen-LIBOR;
 - avoid mentioning Hayes;
 - falsely indicate that the Yen-LIBOR submission process did not take into account trading positions;
 - falsely claim that they never moved the Yen-LIBOR submissions to benefit the Yen trading desks;
 - falsely claim that when contributing Yen-LIBOR submissions, UBS tried to be "as close to the market as possible."

- R. <u>Legal Findings and Implications of Defendants' Manipulative and Collusive</u> Conduct
 - 1. The CFTC Determined Yen-LIBOR and Euroyen TIBOR are Each a Commodity in Interstate Commerce.
- On a daily basis, Defendants, through the transmission of an electronic 741. spreadsheet to the service provider of the BBA and/or JBA who calculates their official fixings (e.g., Thomson Reuters), knowingly delivered or caused to be delivered its Yen-LIBOR and/or Euroyen TIBOR submissions through the mails or interstate commerce. Defendants' submissions were also caused to be delivered through the mails or interstate commerce through the daily dissemination and publication globally, including into the United States, of the panel banks' submissions as well as the daily official benchmark interest rates by at least Thomson Reuters on behalf of the BBA and/or JBA, and other third party vendors. The panel banks' submissions are, and were used during the Class Period, used to determine the official published rates for Yen-LIBOR and/or Euroyen TIBOR, which are calculated based on a trimmed average of the submissions. Defendants' daily Yen-LIBOR and/or Euroyen TIBOR submissions contained market information concerning the costs of borrowing unsecured funds in particular currencies and tenors, the liquidity conditions and stress in the money markets, and Defendants' ability to borrow funds in the Euroyen market. Such market information affects or tends to affect the prices of commodities in interstate commerce, including the daily rates at which Yen-LIBOR and Euroyen TIBOR are fixed.
- 742. The Broker Defendants also knowingly caused to be delivered through the mails or interstate commerce false or misleading or knowingly inaccurate reports concerning Yen bank borrowing rates, through the form of Suggested LIBORs, which is market information that affects or tends to affect the fixing or pricing of Yen-LIBOR, a commodity in interstate commerce. Each business day, Yen-LIBOR panel banks, through the transmission of electronic

spreadsheets to Thomson Reuters, made Yen-LIBOR submissions in contribution to the daily fixing of Yen-LIBOR for various tenors through the mails or interstate commerce. Yen-LIBOR panel banks' submissions were delivered through the mails or interstate commerce by the daily dissemination and publication globally, including into the United States, of the panel banks' submissions as well as the daily official Yen-LIBOR fixing by Thomson Reuters on behalf of the BBA and by other third party vendors. The panel banks' submissions are used to determine the official published rates for Yen-LIBOR, which are calculated based on a trimmed average of the submissions. The Yen-LIBOR panel banks' submissions contain market information concerning the costs of borrowing unsecured funds in Yen in particular tenors, the liquidity conditions and stress in the money markets, and the panel banks' ability to borrow Yen in the London interbank market. Such market information affects or tends to affect the prices of commodities in interstate commerce, including the daily rates at which Yen-LIBOR is fixed.

The Broker Defendants also understood and expected that many of the Yen-LIBOR panel banks relied on the market information disseminated by the Broker Defendants concerning, among other things, the Yen borrowing rates in the London interbank market. Specifically, ICAP brokers provided oral or written Yen-LIBOR predictions, *i.e.*, the "Suggested LIBORs," were supposed to represent an unbiased and honest assessment of Yen borrowing costs in the interbank market. However, to benefit certain ICAP clients, in particular the UBS Senior Yen Trader Tom Hayes, and to assist their efforts to manipulate the fixing of Yen-LIBOR on their behalf, ICAP Yen brokers often knowingly disseminated false, misleading and knowingly inaccurate market information to the Yen Panel banks through two primary means:

(1) Cash Broker 1 and/or others brokers provided skewed Suggested LIBORs, through the daily Yen-LIBOR run thru emails or oral communications with submitters or traders at the Yen-

LIBOR panel banks; and (2) ICAP brokers directly pressured Yen-LIBOR submitters and traders at panel banks to submit certain rates, that were skewed to reflect rates beneficial to the Senior Yen Trader and at times other traders. At times, certain Yen panel banks used ICAP's skewed Suggested LIBORs in determining and making their Yen-LIBOR submissions to the BBA. As a result, those Yen-LIBOR submissions were false, misleading or knowingly inaccurate because the panel banks' submissions purported to reflect the panel banks' perceived costs of borrowing Yen in the inter-bank market, but in reality, reflected in whole or in part the rates that benefited the trading positions of ICAP's clients.

744. Similarly, to benefit certain R.P. Martin clients, specifically the UBS Senior Yen Trader and the RBS Yen Trader, and to assist their efforts to attempt to manipulate the fixing of Yen-LIBOR on their behalf, R.P. Martin Yen brokers at times often knowingly disseminated false, misleading and knowingly inaccurate market information to the Yen Panel banks through three primary means: (1) Terry Farr or others provided skewed Suggested LIBORs through oral communications with submitters or traders at the Yen-LIBOR panel banks; (2) RP Martin brokers directly pressured Yen-LIBOR submitters and traders at panel banks to submit certain rates that were skewed to reflect rates beneficial to the Senior Yen Trader and at times other traders; and (3) R.P. Martin brokers published "spoof" or nonexistent cash bids to the Euroyenbased derivatives market to benefit their clients, including clients who were Yen-LIBOR submitters, to give the Euroyen-based derivatives market false market price information that a Euroyen-based derivatives market participant was willing to trade Yen cash at a particular price. At times, certain Yen-LIBOR Contributor Banks used R.P. Martin's skewed Suggested LIBORs in determining and making their Yen-LIBOR submissions to the BBA. As a result, those Yen-LIBOR submissions were false, misleading or knowingly inaccurate because the panel banks'

submissions purported to reflect the panel banks' perceived costs of borrowing Yen in the interbank market but in reality, reflected in whole or in part the rates that benefited the Euroyen-based derivative positions of R.P. Martin's clients.

- 745. Accordingly, the Broker Defendants' actions, designed and intended to benefit clients and themselves, knowingly caused the panel banks to deliver through the mails or interstate commerce false or misleading or knowingly inaccurate market information that affects or tends to affect a commodity in interstate commerce, including Yen-LIBOR and violated Section 9(a)(2) of the Act, 7 U.S.C. § 13(a)(2) (2006).
 - 2. As Part of its Non-Prosecution Agreement with the DOJ, UBS Admits That False and Misleading Yen-LIBOR and Euroyen TIBOR Contributions Affected or Tended to Affect the Price of Commodities, Including Futures Contracts
- 746. As part of its Non-Prosecution Agreement with the DOJ, UBS admitted that when the requests of derivatives traders for favorable Yen-LIBOR and Euroyen TIBOR submissions were taken into account by the UBS rate submitters, UBS' rate submissions were false and misleading. Those false and misleading Yen-LIBOR and Euroyen TIBOR contributions affected or tended to affect the price of commodities, including futures contracts.
 - 3. Defendants Admit They Successfully Manipulated Yen-LIBOR and/or Euroven TIBOR
- 747. For example, as part of its Non-Prosecution Agreement with the DOJ, UBS admitted that when UBS derivatives traders influenced the submissions of other Contributor Panel Banks by: (1) seeking and receiving accommodations from their counterparts at such banks, or (2) influencing the submissions from other banks with assistance from cash brokers who disseminated misinformation in the marketplace. The manipulation of those submissions affected Yen-LIBOR and Euroyen TIBOR on various occasions. Similarly, as part of their Deferred Prosecution Agreements with the DOJ, Defendants RBS and Rabobank admitted that

when its Yen-LIBOR derivatives traders made requests of RBS' Yen-LIBOR rate submitters in order to influence RBS' Yen-LIBOR submissions, and when the submitters accommodated those requests, the manipulation of the submissions affected the resulting Yen-LIBOR fix on various occasions. In addition, when traders, former traders, and/or submitters, including some at RBS, agreed to coordinate requests for favorable Yen-LIBOR submissions, and when Yen-LIBOR submitters accommodated those requests, the manipulation of submissions affected the Yen-LIBOR fixing on various occasions.

- 4. The CFTC Has Determined That Contributor Bank Defendants UBS, RBS, Rabobank, Deutsche Bank, Barclays, and Lloyds Successfully Manipulated Yen-LIBOR.
- 748. The CFTC has determined that, *inter alia*, Contributor Bank Defendants UBS, RBS, Rabobank, Lloyds, Deutsche Bank, and Barclays' submissions for Yen-LIBOR and/or Euroyen TIBOR were false, misleading, or knowingly inaccurate because they were based in whole or in part on impermissible and illegitimate factors, including the Euroyen-based derivatives positions of their traders. By using these impermissible and illegitimate factors in making its Yen-LIBOR and/or Euroyen TIBOR submissions, Defendants conveyed false, misleading, and/or knowingly inaccurate information while representing that the rates they submitted were truthful and reliable quotes based solely on the cost of borrowing unsecured funds in the relevant markets. Certain of Defendants' managers, traders and submitters at the very least knew that certain of their Yen-LIBOR and/or Euroyen TIBOR submissions contained false, misleading, and knowingly inaccurate information concerning the submitted rates.
 - 5. The CFTC Has Determined that Broker Defendants ICAP and R.P. Martin Successfully Manipulated Yen-LIBOR.
- 749. The CFTC has determined that, *inter alia*, Broker Defendants ICAP and R.P. Martin communicated on a daily basis with banks that participated on the Yen-LIBOR panel and

made submissions that purported to reflect their assessments of their respective banks' costs of borrowing unsecured funds in the London interbank market for Yen across tenors. The official LIBOR fixings are calculated using a trimmed average methodology applied to the rates submitted by the panel banks. By virtue of this methodology, panel banks had the ability to influence or affect the rate that would become the official Yen-LIBOR fixing for any tenor. Accordingly, if the Broker Defendants could influence the rates submitted by the panel banks, then the Broker Defendants had the ability to influence or affect the rate at which Yen-LIBOR would be fixed. As alleged herein, Yen-LIBOR panel banks (in violation of BBA rules) relied upon the market information about Yen borrowing rates and Suggested LIBORs provided by the Broker Defendants, and, at times, at least certain panel banks used the rates suggested by the Broker Defendants in determining and making their submissions. As a result, at times, certain Yen-LIBOR panel banks made false or misleading Yen-LIBOR submissions.

- 6. The CFTC Has Determined that Contributor Bank Defendants UBS, RBS, Rabobank, Deutsche Bank, and Lloyds Aided and Abetted the Manipulation of Yen-LIBOR.
- 750. The CFTC has determined that, inter alia, Contributor Bank Defendants UBS, RBS, Rabobank, Deutsche Bank, and Lloyds aided also aided and abetted traders at other banks to manipulate Yen-LIBOR and/or Euroyen TIBOR. As evidenced by the extensive communications, Defendants' traders and submitters and traders at other panel banks coordinated about Yen-LIBOR and/or Euroyen TIBOR rates that would benefit their banks' or their coconspirators' respective derivatives trading positions. Also, the traders at the other panel banks or brokers on behalf of traders at other banks asked Defendants' traders to submit a certain rate, or submit a rate in a direction higher or lower, that would benefit the cash and derivatives trading positions of the traders at the other panel banks. Defendants' derivatives traders agreed and made the requests of their Yen-LIBOR and/or Euroyen TIBOR submitters, who in turn made

their Yen-LIBOR and/or Euroyen TIBOR submissions based on the derivatives traders' or brokers' requests. In addition, at least one RBS Yen trader knowingly assisted the UBS Yen Trader to manipulate Yen-LIBOR by agreeing to act as counterparty to wash trades opposite UBS to provide extra brokerage commissions to the inter-dealer brokers as payment for their assistance in manipulating Yen-LIBOR.

- 7. The CFTC Has Determined that Broker Defendants ICAP and R.P. Martin Aided and Abetted the Manipulation of Yen-LIBOR.
- 751. The CFTC has determined that, *inter alia*, Broker Defendants ICAP and R.P. Martin aided and abetted and often coordinated with and assisted Euroyen-based derivatives traders at Yen-LIBOR panel banks, primarily the UBS Senior Yen Trader, to manipulate the official Yen-LIBOR fixings for certain tenors by at times causing panel banks to make Yen-LIBOR submissions at rates or levels that that would benefit the derivatives traders' trading positions. The Broker Defendants knew that the UBS Senior Yen Trader and other traders were trying to manipulate Yen-LIBOR to benefit their derivatives trading positions.
 - 8. The CFTC Has Determined Contributor Bank Defendants UBS, RBS, Rabobank, Lloyds, ICAP, R.P. Martin, Deutsche Bank, and Barclays Are Vicariously Liable for the Acts of their Employees in the Manipulation of Yen-LIBOR.
- 752. The CFTC has determined that Contributor Bank Defendants UBS, UBS Japan, RBS, RBS Japan, Rabobank, Lloyds, Deutsche Bank, and Barclays, as well as Broker Defendants ICAP, and R.P. Martin are liable for the acts, omissions, and failures of the managers, traders, submitters, and/or brokers who acted as their employees and/or agents and in violation of Sections 6(c), 6(d) and 9(a)(2) of the CEA, 7 U.S.C. §§ 9, 13b and 13(a)(2).
 - 9. Contributor Bank Defendants UBS, RBS, Rabobank, Lloyds, Deutsche Bank, and Barclays Acknowledge Same in their Non-Prosecution and Deferred Prosecution Agreements with the DOJ.

- 753. As part of their Deferred and Non-Prosecution Agreements with the DOJ, Defendants UBS, RBS, Rabobank, Lloyds, Deutsche Bank, and Barclays each acknowledged that the wrongful acts described in the DOJ Statement of Facts taken by the participating employees in furtherance of the misconduct were within the scope of their employment at their respective financial institution. UBS, RBS, Rabobank, and Barclays also each acknowledged that the participating employees intended, at least in part, to benefit UBS, RBS, Rabobank, Lloyds, and Barclays through the actions described in the DOJ SOF.
 - 10. Contributor Bank Defendants UBS, RBS, Rabobank, Deutsche Bank, and Barclays Admit They Engaged in a Deceptive Course of Conduct When They Submitted or Caused to Be Submitted False and Misleading Yen-LIBOR and Euroyen TIBOR Submissions Designed to Derive Illicit Profits at the Expense of Their Counterparties and other Euroyen-Based Derivatives Participants.
- 754. As part of its Non-Prosecution Agreement with the DOJ, UBS admitted that its derivatives traders and submitters were engaged in a deceptive course of conduct in an effort to gain an advantage over their counterparties. As part of that effort: (1) derivatives traders and submitters submitted and caused the submission of materially false and misleading Yen-LIBOR and Euroyen TIBOR contributions; and (2) derivatives traders, after initiating and continuing their effort to manipulate Yen-LIBOR and Euroyen TIBOR, negotiated and entered into derivative transactions with counterparties that did not know UBS employees were often attempting to manipulate the reference interest rate.
- 755. As part of their Deferred Prosecution Agreements with the DOJ, Defendants RBS, Rabobank, and Deutsche Bank admitted that when the requests of derivatives traders for favorable Yen-LIBOR submissions influenced the RBS, Rabobank, and Deutsche Bank rate submitters' contributions, RBS', Rabobank's, and Deutsche Bank's Yen-LIBOR rate submissions were false and misleading. In making and in accommodating these requests, the

decivatives traders and submitters (and RBS, Rabobank, and Deutsche Bank) were engaged in a deceptive course of conduct in an effort to gain an advantage over their counterparties. As part of that effort: (1) RBS, Rabobank, and Deutsche Bank derivatives traders and submitters submitted, and caused the submission of, materially false and misleading Yen-LIBOR contributions; and (2) RBS, Rabobank, and Deutsche Bank derivatives traders, after initiating and while continuing their effort to manipulate Yen-LIBOR contributions, negotiated and entered into derivatives transactions with counterparties knowing that that those counterparties were unaware of the efforts by RBS', Rabobank's, and Deutsche Bank's employees to manipulate the relevant Yen-LIBOR rate.

As part of its Deferred Prosecution Agreements with the DOJ, Defendant Lloyds admitted that when its submitters made Yen-LIBOR submissions that took trading positions into account, Lloyds' Yen-LIBOR submissions were false and misleading. Those false and misleading Yen-LIBOR contributions affected or tended to affect the price of commodities, including futures contracts that were traded on commodities exchanges and used Yen-LIBOR as a reference rate. In making and accommodating the requests, the traders and submitters involved in the making of these false and misleading submissions (including those at Rabobank) were engaged in a deceptive course of conduct in an effort to gain an advantage over their counterparties. As part of that effort: (1) traders and submitters submitted and caused the submission of materially false and misleading Yen-LIBOR contributions; and (2) traders and submitters, both before and after initiating and continuing their effort to manipulate Yen-LIBOR contributions, negotiated and entered into transactions with counterparties that did not know that Lloyds employees were manipulating Yen-LIBOR.

757. When the request of Barclays' swaps traders for favorable LIBOR submissions were taken into account by the rate submitters, Barclays' rate submissions were false and misleading. In making and in accommodating the requests, the swaps traders and submitters were engaged in a deceptive course of conduct in an effort to gain an advantage over their counterparties. As part of that effort: (1) swaps traders and submitters submitted and caused the submission of materially false and misleading LIBOR contributions; and (2) swaps traders, after initiating and continuing their effort to manipulate LIBOR, negotiated and entered into derivatives transactions with counterparties that did not know that Barclays employees were intending to manipulate LIBOR.

11. Defendants Admit They Were Competitors.

- 758. For example, as part of its Deferred Prosecution Agreement with the DOJ, RBS admitted that traders, former traders, and/or submitters at competing financial institutions, including RBS, agreed to coordinate and in fact coordinated with regard to Yen-LIBOR submissions, causing the manipulation of Yen-LIBOR on certain occasions. Because Yen-LIBOR was a pricing component of Euroyen-based derivatives contracts held by the financial institutions, the traders benefited from this agreement by affecting the profitability of the contracts on particular settlement dates.
 - S. <u>Defendants Plead Guilty or Agree to Waive Indictment to Criminal Charges of Wire Fraud in Connection with Their Manipulation of the Prices of Euroyen-Based Derivatives.</u>
- 759. In connection with their unlawful manipulation of Yen-LIBOR and/or Euroyen TIBOR, Defendants UBS Japan and RBS Japan agreed to waive indictment and plead guilty to a one-count criminal information filed in the District of Connecticut by the Criminal Division, Fraud Section, and the Antitrust Division of the DOJ charging each with wire fraud, in violation of 18 U.S.C. § 1343. As part of its Deferred Prosecution Agreement with the DOJ, RBS Japan's

corporate parent RBS was also charged with wire fraud and price-fixing in violation of Section 1 of the Sherman Act. Defendant Rabobank also waived indictment to wire fraud as part of its own Deferred Prosecution Agreement with the DOJ. *See* Exs. A-4, B-3 and D-4.

1. UBS Japan.

Between approximately 2006 and at least 2009, in the District of Connecticut and elsewhere, UBS Japan, the defendant, unlawfully, willfully, and knowingly, having devised and intending to devise a scheme and artifice to defraud and for obtaining money and property by means of false and fraudulent pretenses, representations, and promises, did transmit and cause to be transmitted by means of wire, radio, and television communication in interstate and foreign commerce, writings, signs, signals, pictures, and sounds for the purpose of executing such scheme and artifice, to wit, the defendant devised and engaged in a scheme to defraud counterparties to interest rate derivatives trades executed on its behalf by secretly manipulating benchmark interest rates to which the profitability of those trades was tied, and in furtherance of that scheme, on or about February 25, 2009, the defendant transmitted or caused the transmission of electronic communications, specifically: (1) an electronic chat between a derivatives trader employed by the defendant and a broker employed at an inter-dealer brokerage firm, (2) a subsequent Yen LIBOR submission from a bank to Thomson Reuters, and (3) a subsequent publication of a Yen LIBOR rate through international and interstate wires, at least one of which passed through, among other locations and facilities, servers located in Stamford, Connecticut.

2. RBS Japan.

761. Between approximately 2006 and at least 2010, in the District of Connecticut and elsewhere, RBS Japan, the defendant, through its employees, unlawfully, willfully, and knowingly, having devised and intending to devise a scheme and artifice to defraud and for obtaining money and property by means of false and fraudulent pretenses, representations, and

promises, did transmit and cause to be transmitted by means of wire, radio, and television communication in interstate and foreign commerce, writings, signs, signals, pictures, and sounds for the purpose of executing such scheme and artifice, to wit, the defendant, through its employees, engaged in a scheme to defraud counterparties to interest rate derivatives trades executed on its behalf by secretly manipulating benchmark interest rates to which the profitability of those trades was tied, and in furtherance of that scheme, on or about October 5, 2009, the defendant transmitted or caused the transmission of electronic communications, specifically: (1) an electronic chat between a derivatives trader employed by the defendant and a derivatives trader employed by the defendant's parent company, (2) a subsequent Yen-LIBOR submission from a bank to Thomson Reuters, and (3) a subsequent publication of a Yen-LIBOR rate—through international and interstate wires, at least one of which passed through, among other locations and facilities, servers located in Stamford, Connecticut.

3. Rabobank.

Between approximately 2005 and at least 2010, Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A., the defendant, through its employees, unlawfully, willfully, and knowingly, having devised and intending to devise a scheme and artifice to defraud and for obtaining money and property by means of false and fraudulent pretenses, representations, and promises, did transmit and cause to be transmitted by means of wire, radio, and television communication in interstate and foreign commerce, writings, signs, signals, pictures, and sounds for the purpose of executing such scheme and artifice, to wit, the defendant, through its employees, engaged in a scheme to defraud counterparties to interest rate derivatives trades executed on its behalf by secretly manipulating benchmark interest rates to which the profitability of those trades was tied, and in furtherance of that scheme, on or about April 17, 2008, the defendant transmitted or caused the transmission of electronic communications.

specifically: (1) an electronic chat between a derivatives trader and a money market trader, (2) a subsequent Yen-LIBOR submission from the defendant to Thomson Reuters, and (3) a subsequent publication of a Yen-LIBOR rate through international and interstate wires.

4. Deutsche Bank

- 763. From at least as early as 2008 through at least 2010, the Defendant, Deutsche Bank AG, through its employees, and its co-conspirators, engaged in a combination and conspiracy in unreasonable restraint of interstate and foreign commerce. The aforesaid combination and conspiracy consisted of an agreement, understanding and concert of action among the Defendant and its co-conspirators, the substantial terms of which were to fix the price of Yen LIBOR-based derivative products by fixing Yen-LIBOR, a key component of the price hereof, on certain occasions.
 - 5. Recently, UBS Waived Indictment and Pled Guilty After the DOJ Revoked a Non-Prosecution Agreement Based on UBS' Continued Market Manipulation and Serial Criminal Conduct
- 764. On December 18, 2012, the DOJ Criminal Division, Fraud Section, and UBS entered into a Non-Prosecution Agreement ("NPA") relating to UBS' submissions of LIBOR (including Yen-LIBOR), Euribor and Euroyen TIBOR ("IBOR Benchmarks") and manipulation of IBOR Benchmarks prior to 2011.
- 765. In the NPA, UBS agreed to "commit no United States crime" whatsoever for a period of two years from the execution date of the NPA and represented that it had, among other things, "strengthened its compliance and internal control standards and procedures" and "sought to effectively remediate any problems it [had] discovered."
- 766. Under the NPA, UBS paid a penalty of \$500 million and committed to real reformation of its operating practices in exchange for the Criminal Division's agreement not to prosecute UBS "for any crimes related to UBS's submissions of benchmark interest rates"

- 767. Rather than adhering to the terms of the NPA, UBS continued to manipulate commodity markets, this time in foreign exchange spot and precious metals markets. After the execution of the NPA, certain UBS employees engaged in "(i) fraudulent and deceptive currency trading and sales practices in conducting certain foreign exchange ("FX") market transactions with customers via telephone, email, and/or electronic chat to the detriment of UBS' customers and (ii) collusion with other participants in certain FX markets."
- 768. UBS, pursuant to the terms of the NPA, reported its continued manipulation to the DOJ, Criminal Division. The Criminal Division determined that UBS' conduct breached the NPA. In making its determination, the Criminal Division cited that UBS was a serial offender, having entered into multiple civil and regulatory settlements for violations.
- 769. Further, UBS' FX manipulation was the fourth U.S. criminal matter to come before the DOJ in the past six years. In addition to the IBOR Benchmark and the FX manipulation, in February 2009, UBS entered into a Deferred Prosecution Agreement with the DOJ Tax Division for conspiring to defraud the United States of tax revenue through secret bank accounts for U.S. taxpayers. In May 2011, UBS entered into a separate Non-Prosecution Agreement with the Antitrust Division relating to its involvement in bid-rigging in the municipal bond derivatives market.
- 770. Subsequent to the Criminal Division's declaration of a breach of the NPA, UBS entered into a plea agreement on May 20, 2015 ("May 2015 Agreement"). In the May 2015 Agreement, UBS waived indictment and agreed to plead guilty to one count of a wire fraud in furtherance of a scheme to defraud counterparties to interest rate derivatives transactions by manipulating Yen-LIBOR. UBS admitted that the factual allegations of the charging

information were true and reflected UBS' conduct in connection with IBOR Benchmarks, including Yen-LIBOR.

- 771. In addition to an obligation to cooperate with the Criminal Division and other undertakings, UBS also agreed to pay an additional criminal fine of \$203 million, and was to enter into a separate Cooperation and Non-Prosecution Agreement with the DOJ Antitrust Division relating to foreign exchange antitrust offenses.
 - T. <u>Defendants Former Traders and Brokers Have Been Criminally Charged with an Antitrust Violation, Wire Fraud and Conspiracy to Defraud Charges in the U.S. and U.K.</u>
 - 1. Former UBS and Citibank Yen Trader Thomas Hayes and Former UBS Yen Trader Roger Darin
- 772. Hayes and another former UBS Trader, Roger Darin, have been charged by the DOJ with conspiracy to commit wire fraud, wire fraud and antitrust violations in connection with the manipulation of Yen-LIBOR. *See* Ex. A-6, Complaint filed in *U.S. v. Hayes et al.*, 12 MAG 3229 (S.D.N.Y. Dec. 12, 2012) (the "Hayes/Darin Criminal Complaint").
- 773. The Hayes/Darin Criminal Complaint includes numerous communications evidencing blatant market manipulation and illicit conspiratorial conduct between UBS and RBS, among others, while Hayes was employed at Defendant UBS. The Hayes/Darin Criminal Complaint also includes communications evidencing manipulative and conspiratorial conduct by Thomas Hayes after he left Defendant UBS to join Defendant Citigroup.
- 774. In June 2013, the U.K. SFO also charged former UBS and Citibank trader Hayes with eight counts of conspiracy to defraud, directly implicating Defendants (i) UBS AG; (ii) Citigroup Global Markets Japan Limited, (iii) Deutsche Bank AG, (iv) UBS Japan, (v) JP Morgan Chase & Co., (vi) The Royal Bank of Scotland plc, (vii) HSBC and (viii) Rabobank, as

well as Broker Defendants (i) ICAP plc, (ii) R.P. Martin Holdings Limited and (iii) Tullett Prebon plc. Specifically the U.K. SFO alleges:

- a. Between December 1, 2009, and September 7, 2010, at within the jurisdiction of Central Criminal Court conspired together with other employees of Citigroup Global Markets

 Japan Limited and associated entities to defraud in dishonestly seeking to manipulate Yen

 London Interbank Offered Rates and other interbank offered rates, by procuring or making the submission of rates by Citigroup as a contributing Panel Bank to Thomson Reuters, with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another.
- b. Between December 1, 2009, and September 7, 2010, at within the jurisdiction of Central Criminal Court conspired together with employees of UBS AG, Deutsche Bank AG and others to defraud in dishonestly seeking to manipulate Yen London Interbank Offered Rates and other interbank offered rates, by procuring or making the submission of rates by contributing Panel Banks to Thomson Reuters, with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another.
- c. Between December 1, 2009, and September 7, 2010, at within the jurisdiction of Central Criminal Court conspired together with employees of ICAP plc and others to defraud in dishonestly seeking to manipulate Yen London Interbank Offered Rates and other interbank offered rates, by procuring or making the submission of rates by contributing Panel Banks to Thomson Reuters, with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another.
- d. Between December 1, 2009, and September 7, 2010, at within the jurisdiction of Central Criminal Court conspired together with employees of ICAP plc and others to defraud in

dishonestly seeking to manipulate Yen London Interbank Offered Rates and other interbank offered rates, by procuring or making the submission of rates by contributing Panel Banks to Thomson Reuters, with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another.

- e. Between August 8, 2006, and December 3, 2009, at within the jurisdiction of Central Criminal Court conspired together with other employees of UBS Japan and associated entities (together "UBS") to defraud in dishonestly seeking to manipulate Yen London Interbank Offered Rates and other interbank offered rates, by procuring or making the submission of rates by UBS as a contributing Panel Bank to Thomson Reuters, with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another.
- f. Between August 8, 2006 and December 3, 2009 at within the jurisdiction of Central Criminal Court conspired together with employees of JP Morgan Chase & Co, The Royal Bank of Scotland Group plc, Deutsche Bank AG and others to defraud in dishonestly seeking to manipulate Yen London Interbank Offered Rates and other interbank offered rates, by procuring or making the submission of rates by contributing Panel Banks to Thomson Reuters, with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another.
- g. Between August 8, 2006, and December 3, 2009, at within the jurisdiction of Central Criminal Court conspired together with employees of UBS AG, ICAP plc and others to defraud in dishonestly seeking to manipulate Yen London Interbank Offered Rates and other interbank offered rates, by procuring or making the submission of rates by contributing Panel Banks to Thomson Reuters, with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another.

- h. Between August 8, 2006, and December 3, 2009, at within the jurisdiction of Central Criminal Court conspired together with employees of UBS AG, R.P. Martin Holdings Limited, Tullett Prebon plc, Rabobank, HSBC and others to defraud in dishonestly seeking to manipulate Yen London Interbank Offered Rates and other interbank offered rates, by procuring or making the submission of rates by contributing Panel Banks to Thomson Reuters, with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another.
- 775. On August 3, 2015, Hayes was convicted of all eight counts of conspiracy to defraud listed above and sentenced to fourteen years in U.K. prison.

2. Former ICAP Brokers.

776. Three former ICAP brokers, Darrell Read, Daniel Wilkinson, and Colin Goodman, have been charged by the DOJ with conspiracy to commit wire fraud and wire fraud in connection with the manipulation of Yen-LIBOR. *See* Ex. C-3. The DOJ alleges the three former ICAP brokers conspired with former UBS trader Hayes from July 2006 through September 2009. The same ICAP brokers were also charged by the U.K. SFO with conspiracy to defraud charges for their manipulation of Yen-LIBOR from August 8, 2006 through September 7, 2010.

3. Former R.P. Martin Brokers Terry John Farr and James Andrew Gilmour.

777. In July 2013, the U.K. SFO also charged former R.P. Martin broker Terry Farr and James Gilmour with conspiracy to defraud charges. Between August 8, 2006, and December 3, 2009, both Farr and Gilmour are alleged to have conspired to manipulate Yen-LIBOR and other interbank offered rates with, among others, former UBS trader Tom Hayes and fellow R.P. Martin broker James Gilmour, as well as other yet-to-be named traders and brokers at Defendants UBS, Tullett Prebon, Rabobank, and HSBC. Farr is also alleged to have conspired

with Hayes to manipulate Yen-LIBOR between January 12, 2009, and July 9, 2010, when Hayes was employed by Citi Group Global Markets.

4. Former Rabobank Traders.

778. Three former Rabobank traders, Paul Robson, Paul Thompson, and Tetsuya Motomura have been charged by the DOJ with conspiracy to commit wire fraud, conspiracy to commit bank fraud, and wire fraud in connection with the manipulation of Yen-LIBOR from May 2006 through early 2011. *See* Ex. D-5. A fourth former Rabobank trader, Takayuki Yagami, pleaded guilty to conspiracy to commit wire and conspiracy to commit bank fraud for his role in the conspiracy to manipulate Yen-LIBOR and the prices of Euroyen-based derivatives.

V. <u>Defendants' Unlawful Conduct Has Also Led to Investigations, Issuance Of Findings of Misconduct and Administrative Sanctions With Governmental Authorities in the U.S.</u> and Abroad

779. Defendants' unlawful conduct has led to numerous government investigations, both domestically and abroad, including by the DOJ, CFTC, SEC, FSA, the Japanese Securities and Exchange Surveillance Commission, the Canadian Competition Bureau, the Swiss Competition Commission, Swiss financial market supervisory authority FINMA, the Monetary Authority for Singapore, BaFin, and the NYSDFS.

A. Recommendations and Findings by the Japanese Securities and Exchange Surveillance Commission and Administrative Action by the Japanese Financial Services Agency

- 780. The Japanese Securities and Exchange Surveillance Commission ("JSESC") conducted inspections of UBS Japan, Citigroup Global Markets Japan Inc., and RBS Japan, and found violations of the Japanese Financial Instruments and Exchange Act.
- 781. On December 9, 2011, the JSESC recommended that the Japanese Financial Services Agency ("JFSA") take administrative actions against Defendant UBS Securities Japan

Ltd. (hereinafter "the JSESC Recommendation for Administrative Action Against UBS") as well as against Defendant Citigroup Global Markets Japan Inc. (hereinafter the "JSESC Recommendation for Administrative Action Against Citigroup").

1. UBS

782. The JSESC Recommendation for Administrative Action Against UBS provides as follows:

1. Contents of the Recommendation

Pursuant to Article 20, paragraph 1 of the Act for Establishment of the financial Services Agency (FSA), today, on December 9, 2011, the Securities and Exchange Surveillance Commission issued a recommendation that the Prime Minister and the Commissioner of the FSA take administrative action and any other appropriate measures against UBS Securities Japan Ltd. (hereinafter referred to as the "Company"). This recommendation is based on the findings of an inspection, whereby the following breach of laws and regulations by the Company was identified.

*Location Chiyoda-Ku Tokyo

Representative in Japan Mr. Toshiharu Kojima

Capital 60,000 million Yen

Number of officers and employees 822

Registration types Type I Financial Instruments Business

Operator

Type II financial Instruments Business

Operator

2. Summary of the findings

Inappropriate actions related to Euroyen TIBOR (hereinafter referred to as "TIBOR")

A yen rates trader at the Rates Department of the Fixed Income, Currencies and Commodities Division in the Company (at that time; hereinafter referred to as "Trader A") had continuously conducted approaches such as requesting a person in charge of submitting the TIBOR rates of UBS AG, Tokyo Branch (hereinafter referred to as "Submitting Personnel") to change its rates since around March

2007 at the latest, and also had continuously conducted approaches such as requesting persons in charge of submitting the TIBOR rates of other banks (hereinafter, including Submitting Personnel, referred to as "Submitting Personnel, etc.") since around February 2007 at the latest, for the purpose of fluctuating TIBOR so as to give advantages to the Derivative Transactions related to yen rates which Trader A was conducting.

The actions conducted by Trader A are acknowledged to be seriously unjust and malicious, and could undermine the fairness of the markets, considering that three-month TIBOR is the underlying asset of Three-month Euroyen Futures listed on Tokyo Financial Exchange Inc., Trader A conducted transactions of Three-month Euroyen Futures on Tokyo Financial Exchange Inc., and TIBOR is a significantly important financial index as a basic interest rate when banks raise or lend money. Therefore, the aforementioned actions conducted by Trader A are acknowledged to have a serious problem from the viewpoints of the public interest and protection of investors.

Furthermore, Trader A had also continuously conducted inappropriate approaches such as requesting to change the Yen-LIBOR rates that UBS group submitted, since around June 2007 at the latest.

The Company's internal control system is also acknowledged to have a serious problem, since the approaches have been overlooked for long periods and no appropriate measures have been taken.

As mentioned above, i) Trader A is acknowledged to conduct approaches against Submitting Personnel, etc. for Market Derivatives Transactions, which he was conducting under the Company's proprietary trading legally defined as Financial Instruments Business, ii) the actions are acknowledged to be unjust and malicious, from the viewpoints of the public interest and protection of investors, and could undermine the fairness of the markets, iii) Trader A conducted approaches regarding not only TIBOR but also Yen-LIBOR, and iv) the Company's internal control system is acknowledged to have a serious problem. Therefore, the Company's actions are acknowledged to fall under Article 52, paragraph 1(ix) of the Financial Instruments and Exchange Act, which stipulates "when a wrongful act or extremely unjust act has been conducted with regard to Financial Instruments Business, and when the circumstances are especially serious."

783. On December 16, 2011, based upon the JSESC Recommendation, the JFSA agreed to take administrative action against UBS. In particular, the JFSA issued a "Business Suspension Order" requiring UBS Securities Japan to suspend trading in derivatives transactions

related to Euroyen TIBOR and Yen-LIBOR from January 10 to January 16, 2012 (excluding transactions required to perform existing contracts).

784. The JFSA also issued a "Business Improvement Order" requiring UBS Securities Japan to: "(a) Clarify the responsibility of management and staff regarding the violation. (b) Secure strict compliance by all management and staff members. (c) Take preventive measures against recurrence of the above-mentioned violations, including measures to improve the control environment for governance and business operation. [and] (d) Submit a written report to the FSA on the implementation of the above"

2. Citigroup/Citibank

785. The JSESC Recommendation for Administrative Action against Citigroup provides as follows:

1. Contents of the Recommendation

Pursuant to Article 20, paragraph 1 of the Act for Establishment of the Financial Services Agency (FSA), today, on December 9, 2011, the Securities and Exchange Surveillance Commission (SESC) issued a recommendation that the Prime Minister and the Commissioner of the FSA take administrative action and any other appropriate measures against Citigroup Global Markets Japan Inc. (hereinafter referred to as the "Company"). This recommendation is based on the findings of an inspection, whereby the following breaches of laws and regulations by the Company were identified.

*Location Chiyoda-Ku Tokyo

President and CEO Mr. Brian Mccappin

Capital 96,300 Million Yen

Number of officers and employees 729

Registration types Type I Financial Instruments Business

Operator

Type II financial Instruments Business

Operator

2. Summary of the findings

(1) <u>Inadequate response to the administrative order</u>

In response to the order by the FSA pursuant to Article 56-2, paragraph 1 of the Financial Instruments and Exchange Act (FIEA), the Company submitted a report regarding the involvement of directors/employees in Euroyen TIBOR (hereinafter referred to as "TIBOR") and Yen-LIBOR. The SESC, through its inspection, verified the accuracy and sufficiency of the content of the report, and revealed that the report lacked a description of important matters regarding inappropriate approaches against submitting rates and contained an untruthful description, the conclusion of the report was derived from this untruthful description, and therefore the contents of the report were inappropriate.

The lack of important matters and the untruthful description in the report are acknowledged to violate the administrative order by the FSA Commissioner based on Article 56-2 of the FIEA, and the Company's actions related to the report are acknowledged to fall under Article 52, paragraph 1(vi) of the FIEA, which stipulates "violation of the disposition given by government agencies under laws and regulations pertaining to Financial Instruments Business."

(2) <u>Inappropriate actions related to TIBOR</u>

The Head of the G10 Rates in the Company (at that time; hereinafter referred to as "Director A") had continuously conducted approaches such as requesting a person in charge of submitting the TIBOR rates of Citibank Japan Ltd. (hereinafter referred to as "Submitting Personnel") to change its rates since around April 2010 at the latest, and a Yen Rates trader at the G10 Rates (hereinafter referred to as "Trader B") had continuously conducted approaches such as questioning persons in charge of submitting the TIBOR rates of other banks (or securities firms belonging to their financial conglomerates, hereinafter, including Submitting Personnel, referred to as "Submitting Personnel, etc.") since Trader B joined the Company in December 2009, for the purpose of fluctuating TIBOR so as to give advantages to the Derivatives Transactions related to yen rates which Director A and Trader B were conducting.

The actions conducted by Director A and Trader B are acknowledged to be seriously unjust and malicious, and could undermine the fairness of the markets, considering that three-month TIBOR is the underlying asset of Three-month Euroyen Futures listed on Tokyo Financial Exchange Inc., Director A and Trader B conducted transactions of Three-month Euroyen Futures on Tokyo Financial Exchange Inc., and TIBOR is a significantly important financial index as a basic interest rate when banks raise or lend money. Therefore, the aforementioned actions by Director A and Trader B are acknowledged to have a serious problem from the viewpoints of the public interest and protection of investors.

Furthermore, Trader B had also continuously conducted inappropriate approaches such as requesting to change the Yen-LIBOR rates that Citibank group submitted, since December 2009.

In spite of recognizing these actions, the President and CEO (hereinafter referred to simply as the "CEO"), who was also responsible for the G10 Rates, overlooked these actions and the Company did not take appropriate measures, therefore, the Company's internal control system is acknowledged to have a serious problem.

As mentioned above, i) Director A and Trader B are acknowledged to have conducted approaches against Submitting Personnel, etc. for Market Transactions of Derivatives which they were conducting under the Company's proprietary trading legally defined as Financial Instruments Business, ii) the actions are acknowledged to be unjust and malicious, from the viewpoints of the public interest and protection of investors, and could undermine the fairness of the markets, iii) Trader B conducted approaches regarding not only TIBOR but also Yen-LIBOR, and iv) the Company's internal control system is acknowledged to have a serious problem. Therefore, the Company's actions are acknowledged to fall under Article 52, paragraph 1(ix) of the FIEA, which stipulates "when a wrongful act or extremely unjust act has been conducted with regard to Financial Instruments Business, and when the circumstances are especially serious."

(3) <u>Sales activity without necessary registration of a Sales Representative by a senior executive</u>

Director A had conducted Market Transactions of Derivatives since November 12, 2009.

However, the Company had not registered Director A as a Class-1 Sales Representative with Japan Securities Dealers Association, which is necessary to conduct Market Transactions of Derivatives, until June 16, 2010.

The CEO has not taken appropriate measures, such as directing related sections including the Compliance Division to address this issue, even after the CEO recognized that Director A conducted sales activities without necessary registration. Therefore, the Company's internal control system is acknowledged to have a serious problem.

The Company had the employee conduct duties of Sales Representatives without necessary registration. The aforementioned action of the Company is acknowledged to constitute a breach of Article 64, paragraph 2 of the FIEA.

786. On December 16, 2011, based upon the JSESC Recommendation, the JFSA agreed to take administrative action against Citigroup. In particular, the JFSA issued a "Business

Suspension Order" requiring Citigroup to suspend trading in derivatives transactions related to TIBOR and Yen-LIBOR from January 10 to January 23, 2012 (excluding transactions required to perform existing contracts).

- 787. The JFSA also issued a "Business Improvement Order" requiring Citigroup to: "(a) Clarify the responsibility of management and staff regarding the violation. (b) Secure strict compliance by all management and staff members. (c) Take preventive measures against recurrence of the above-mentioned violations, including measures to improve the control environment for governance and business operation. [and] (d) Submit a written report to the FSA on the implementation of the above"
- 788. UBS and Citibank did not deny the JSESC's findings. A UBS spokesperson stated the bank was taking the findings "very seriously" and had been "working closely with" the SESC and the JFSA "to ensure all issues are fully addressed and resolved." The UBS spokesperson also added, "We have taken appropriate personnel action against the employee involved in the conduct at issue." A Citigroup spokesperson similarly stated, "Citigroup Global Markets Japan takes the matter very seriously and sincerely apologizes to clients and all parties concerned for the issues that led to the recommendation. The company has started working diligently to address the issues raised."
- 789. *The Wall Street Journal*, in a February 7, 2012 article, reported that Tom Hayes, who joined UBS in 2006 "and traded products linked to the pricing of short-term yendenominated borrowings" was the UBS trader referenced in the JSESC's Recommendation for Administrative Action against UBS. The same *Wall Street Journal* article reported that Christopher Cecere, a former managing director and a trader for Citigroup Global Markets Japan Inc., was the Citigroup trader referenced in the JSESC's Recommendation for Administrative

Action Against Citigroup. According to the *Wall Street Journal*, "Mr. Cecere supervised Mr. Hayes when the former UBS trader joined Citigroup in December 2009. The Japanese regulator concluded that Mr. Cecere was persuaded by Mr. Hayes to 'continuously conduct' attempts to influence the Tibor rate."

790. On February 10, 2012, the *Financial Times* reported that the manipulation of TIBOR was "uncovered after another Citi employee in London reported the activity." The *Financial Times* also reported that "Citi took a \$50m loss when it unwound the traders' positions and reported the matter to regulators. . . . However, other Citi sources suggested the losses were significantly in excess of that amount."

3. RBS

- 791. On April 12, 2013, the JFSA, based upon April 5, 2013 Recommendations for Administrative Actions by the JSESC, took administrative action against Defendant RBS Japan for a violation of the Financial Instruments and Exchange Act relating to RBS' submission of false Yen-LIBOR rates during the period from around middle 2006 to early 2010.
 - 792. The JFSA Administrative Actions against RBS Japan provides as follows:

1. Descriptions of the Recommendation

(1) Inappropriate conducts related to Yen LIBOR

From around middle of 2006 to early 2010, one trader at the Department of Short Term Market (at the time; hereinafter referred to as "Trader A") and his colleagues at RBS Securities continuously approached Yen LIBOR submitters of Royal Bank of Scotland plc (hereinafter referred to as "RBS plc") including through RBS plc's traders and made requests to change Yen LIBOR submissions in order to affect Yen LIBOR in favor of the derivative transactions by Trader A and his colleagues.

The above conducts of Trader A and his colleagues could undermine the market integrity, considering that Yen LIBOR is a significantly important financial index that serves as a benchmark interest rate for various financial transactions. Therefore, the conducts are acknowledged to be seriously unjust and malicious and have a serious problem from the viewpoints of the public interest and protection of investors.

Furthermore, in light of the fact that RBS Securities has failed to identify these misconducts for a long period of time and has not taken any appropriate measures, it is acknowledged that its internal control system has serious deficiencies.

The conducts mentioned above in (1) are acknowledged to be unjust and malicious and have a serious problem from the viewpoints of the public interest and the investor protection, since (i) these conducts are recognized to be made in the course of RBS Securities' business operation and (ii) such conducts could undermine the market integrity. Furthermore, it is acknowledged that its internal control system has significant deficiencies. Therefore, it is acknowledged that the situation of RBS Securities' business operation is a case where administrative action is "necessary and appropriate for the public interest or protection of investors, with regard to a Financial Instruments Business Operator's business operation" as stipulated under Article 51 of the "FIEA".

B. Swiss Competition Commission Investigation

- 793. On February 3, 2012, the *Wall Street Journal* reported that UBS AG, Credit Suisse Group AG, Bank of Tokyo-Mitsubishi UFJ, Ltd., Citigroup Inc., Deutsche Bank AG, HSBC Holdings Plc, J.P. Morgan Chase & Co., Mizuho Financial Group Inc., Rabobank International, Royal Bank of Scotland Group Plc, Société Générale S.A., and Sumitomo Mitsui Banking Corp., among others, were under investigation by COMCO, the Swiss competition regulatory body, for colluding with one another to manipulate Euroyen TIBOR and Yen-LIBOR rates and the prices of interest rate derivatives benchmarked to these rates.
- 794. COMCO's investigation, like other government investigations, was prompted by information and documents provided by a leniency applicant, believed to be UBS, pursuant to COMCO's antitrust leniency program.
 - 795. According to a February 3, 2012 press release, COMCO reported that:

COMCO has received information regarding potential unlawful agreements among banks. Specifically, collusion between derivative traders might have influenced the reference rates LIBOR and TIBOR. Furthermore, market conditions regarding derivative products based upon these reference rates might have been manipulated too. Hence, COMCO has opened an investigation against UBS and Credit Suisse, as well as against more than ten foreign financial institutions and other companies.

The Secretariat of COMCO ("Secretariat") received an application for its leniency program, which indicated that derivatives traders of various banks might have influenced the reference rates LIBOR and fixed with respect to certain currencies. The London Interbank Offered Rate (LIBOR) and the Tokyo Interbank Offered Rate (TIBOR) are reference rates which are aimed at reflecting the interest level in the interbank deposit market. The British Bankers' Association (for LIBOR) and the Japanese Bankers' Association (for TIBOR) calculate these rates on a daily basis, for a range of currencies, based on submissions by respective panel banks. Derivative traders working for a number of financial institutions might have manipulated these submissions by coordinating their behaviour, thereby influencing these reference rates in their favour. Moreover, derivative traders might have colluded to manipulate the difference between the ask price and the bid price (spread) of derivatives based on these reference rates to the detriment of their clients.

Beside the two major Swiss Banks, UBS and Credit Suisse, ten foreign banks (Bank of Tokyo Mitsubishi UFJ, Citigroup Inc., Deutsche Bank AG, HSBC Holdings plc, JP Morgan Chase & Co., Mizuho Financial Group Inc., Coöperative Centrale Raiffeisen-Boerenleenbank B.A., Royal Bank of Scotland Group plc, Société Générale S.A., Sumitomo Mitsui Banking Corporation) and other financial intermediaries are subject to this investigation led by the Secretariat.

C. <u>Disclosures Confirm the Existence of Investigations, Disclose Additional</u> <u>Investigations and/or Efforts to Reach Potential Settlements with Regulators</u>

796. In a Form 20-F filed with the SEC on July 23, 2012, Mitsubishi UFJ Financial Group, Inc. disclosed that it had "received requests and subpoenas for information from government agencies in some jurisdictions, including the United States and Europe, which are conducting investigations into past submissions made by panel members, including us, to the bodies that set various interbank offered rates. We are cooperating with these investigations."

797. In an Interim Report published in July 2012, Defendant HSBC Holdings plc confirmed that various authorities and enforcement authorities around the world, including in the U.S., U.K., and Asia were conducting investigations related to submissions made by panel banks in connection with the setting of LIBOR and other interest rates. HSBC added that: "As certain HSBC entities are members of such panels, HSBC and/or its subsidiaries have been the subject of regulatory demands for information and are cooperating with those investigations."

- 798. In a Form 10-Q/A dated August 9, 2012, JPMorgan Chase disclosed that it has received subpoenas and requests for documents and, in some cases, interviews, from the DOJ, CFTC, SEC, European Commission, FSA, CCB, and COMCO, relating to, among other matters, JPMorgan's submissions of Yen-LIBOR rates to the BBA and Euroyen TIBOR to the JBA.
- 799. On November 6, 2012, Defendant Citibank announced in its quarterly financial filing that the Monetary Authority for Singapore had launched an investigation of its LIBOR and related rate submissions. Citigroup disclosed that it had "received additional requests for information and documents from various domestic and overseas regulators and enforcement agencies, including the Monetary Authority for Singapore and a consortium of state Attorneys General."
- 800. In an update to a 2012 Registration Statement filed with the AMF on November 8, 2012, Defendant Société Générale disclosed that "Société Générale, along with other financial institutions, has received requests for information from several authorities in Europe, the United States and Asia, in connection with investigations regarding submissions to the [BBA] for setting certain [LIBOR] . . . as well as trading in derivatives indexed to various rates. Société Générale is cooperating fully with the investigating authorities."

D. <u>Dozens of Defendants' Employees Are Under Investigation and/or Have</u> Resigned, or Been Suspended, or Fired or Arrested

801. According to public reports, dozens of traders employed by the Contributor Bank and Broker Defendants have been fired or suspended or put under investigation by worldwide regulators for their alleged involvement in the manipulation of benchmark rates. Such firings, terminations, and/or announced investigations of individuals employed or affiliated with the Defendants include, but are not limited, to the following:

1. RBS

- 802. According to public reports, Defendant RBS fired at least four employees in connection with their manipulation of Yen-LIBOR: Paul White, Andrew Hamilton, Neil Danziger, and Tan Chi Min.
- 803. Paul White was RBS' principal rate-setter for Yen-LIBOR. According to *Reuters*, Mr. White was fired by RBS in late 2011 in connection with his involvement in RBS' alleged manipulation of Yen-LIBOR.
- 804. Andrew Hamilton was an investment advisor for RBS in its London office. According to *Bloomberg*, Mr. Hamilton was fired by RBS on October 21, 2011.
- 805. Neil Danziger was a foreign-exchange trader for RBS in its London office.

 According to *Bloomberg*, Mr. Danziger was fired by RBS on October 21, 2011.
- 806. Tan Chi Min ("Jimmy Tan") was the head of short-term interest rate trading for Yen at RBS and the head of Delta One trading in Singapore. Tan was fired in November 2011.
- 807. In addition, other RBS traders have been implicated in the manipulation of Yen-LIBOR. According to CCB Officer Brian Elliott's May 18, 2011 affidavit, Brent Davies, an RBS trader, was one of the traders believed to be involved in the manipulation of Yen-LIBOR. According to the affidavit, Trader A explained to Mr. Davies who his collusive contacts were and how he had and was going to manipulate Yen-LIBOR. Trader A also communicated his trading positions, his desire for certain movement in Yen-LIBOR and gave instructions for Mr. Davies to get RBS to make Yen-LIBOR submissions consistent with Trader A's wishes. Mr. Davies acknowledged these communications and confirmed that he would follow through. Trader A and Mr. Davies also entered into transactions that aligned their trading interest in regards to Yen-LIBOR.

- 808. In addition, Will Hall, a derivatives trader at RBS in London, was named in Elliott's May 18, 2011 affidavit as one of the traders believed to be involved in the manipulation of Yen-LIBOR. According to the affidavit, Trader A communicated to Mr. Hall his trading positions, his desire for a certain movement in Yen-LIBOR and instructions to get RBS to make Yen-LIBOR submissions consistent with his wishes, and Mr. Hall agreed to do this.
- 809. Todd Morakis was RBS' Singapore-based head of trading for emerging markets.

 According to documents filed in the Singapore litigation, Mr. Morakis "orally confirmed to

 [Tan] around October [2011] that 'the practice of requesting to change the rate Libor is common in every rate setting environment in the banking industry."
- 810. Further, Jezri Mohideen, RBS head of rates trading and yen products, was suspended as a result of his involvement in the manipulation of Yen-LIBOR.

2. Citibank/Citigroup

- 811. Christopher Cecere was the head of G10 trading and sales for Asia at Citibank. The JFSA found that Mr. Cecere ("Director A" in the FSA administrative case) and another Citigroup trader engaged in "seriously unjust and malicious" conduct by asking bankers to alter data they submitted while setting a benchmark Japanese lending rate [*i.e.*, Euroyen TIBOR]. Along with Cecere, Tom Hayes was a Tokyo-based derivatives trader of yen-related products for Citibank.
- 812. The *Financial Times* reported that Hayes "attempted to pressure colleagues and employees at other banks involved in the rate-setting process for the Tokyo Interbank Offered Rate, or Tibor." In addition, Hayes "allegedly worked with …other traders to push submissions up or down for a benchmark interest rate called yen Libor." Hayes was fired by Citibank in 2010.

- 813. Brian McAppin was Citigroup's brokerage head in Japan. The Japanese investigation found that McAppin "overlooked" attempts by two traders to influence interest rates despite "recognizing these actions."
- 814. Citigroup Inc.'s head of Japan banking, Darren Buckley, resigned as chief executive officer of Citibank Japan Ltd., and Citigroup was forced to write off \$50 million dollars in losses when it unwound positions it held in Euroyen derivatives and reported the rate setting misconduct to regulators.
- 815. Tom Hayes was fired by Citigroup less than a year after the bank hired him after an internal investigation revealed that Hayes had manipulated Yen-LIBOR.

3. UBS

- 816. Two former UBS traders, Tom Hayes and Roger Darin have been criminally indicted by the DOJ.
- 817. On August 8, 2012, the *Wall Street Journal* reported that UBS had fired or suspended approximately 20 traders and managers following UBS' involvement in the manipulation of Yen-LIBOR and Euroyen TIBOR. The *Financial Times* also reported that Yvan Ducrot, co-head of UBS' rates business, and Holger Seger, the global head of short-term interest rates trading at UBS, were both suspended by UBS.
- 818. On January 9, 2013, *Bloomberg* reported that UBS had "dismissed, penalized or reprimanded" over 40 people. About 18 people had lost their jobs and UBS had "taken action" against 40 people.
- 819. Two former UBS traders in Singapore, Mukesh Kumar Chhaganlal (UBS' former co-head of macro-trading for emerging markets in Asia) and Prashant Mirpuri (a former UBS executive director) each claimed in separate lawsuits against UBS that they were fired by UBS in an effort to cover up its role in the manipulation of Yen-LIBOR and Euroyen TIBOR.

4. JPMorgan Chase

- 820. Paul Glands was a derivatives trader with JPMorgan Chase in London. He was named in CCB Officer Elliott's May 18, 2011 affidavit as one of the traders believed to be involved in the manipulation of Yen-LIBOR. According to the affidavit, Trader A communicated to Mr. Glands his trading positions, his desire for a certain movement in Yen-LIBOR, and instructions to get JPMorgan Chase to make Yen-LIBOR submissions consistent with his wishes, and Mr. Glands agreed to do so.
- 821. Stewart Wiley was a derivatives trader with JPMorgan Chase in London. He was named in CCB Officer Elliott's May 18, 2011 affidavit as one of the traders believed to be involved in the manipulation of Yen-LIBOR. According to the affidavit, Trader A communicated to Mr. Wiley his trading positions, his desire for a certain movement in Yen-LIBOR, and instructions to get JPMorgan Chase to make Yen-LIBOR submissions consistent with his wishes, and Mr. Wiley agreed to do so. According to CCB Officer Brian Elliott's May 18, 2011 affidavit, the Cooperating Party's Trader A also asked if Paul Glands or Stewart Wiley required certain Yen-LIBOR submissions to aid their trading positions.

5. Deutsche Bank

822. Guillaume Adolph was a Deutsche derivatives trader who was named in CCB Officer Elliott's May 18, 2011 affidavit as one of the traders believed to be involved in the manipulation of Yen-LIBOR. According to the affidavit, Trader A communicated to Adolph his trading positions, his desire for a certain movement in Yen-LIBOR and instructions to get Deutsche to make Yen-LIBOR submissions consistent with his wishes, and Adolph agreed to do so. Further, according to the affidavit, Adolph shared his trading positions with Trader A.

Trader A also aligned his trading positions with Adolph to align their interests in respect of Yen-

- LIBOR. Adolph was fired by Deutsche in December 2011 for conspiring with former UBS Trader Tom Hayes to manipulate Yen-LIBOR.
- 823. In January 2013, Deutsche Bank announced that it fired at least two traders in connection with LIBOR-rigging.
- 824. On November 28, 2012, *The Wall Street Journal* reported that Deutsche had admitted to the German Parliament that it failed to uphold interest rate reporting standards.

6. HSBC

825. Peter O'Leary was an HSBC derivatives trader who was named in CCB Officer Elliott's May 18, 2011 affidavit as one of the traders believed to be involved in the manipulation of Yen-LIBOR. According to the affidavit, O'Leary was instructed by Trader A at UBS "to get HSBC to make Yen-LIBOR submissions consistent with his wishes."

7. Barclays

826. Following the announcement of the Barclays Settlement, Chairman Marcus Agius, Chief Executive Officer Robert Diamond, and Chief Operating Officer Jerry Del Missier resigned. On November 28, 2012, *The Wall Street Journal* reported that Defendant Barclays had disciplined 13 members of its staff for their involvement in LIBOR rate-fixing.

8. Bank of Tokyo-Mitsubishi UFJ/Mitsubishi UFJ Financial Group

- 827. Christian Schluep was suspended by Defendant Bank of Tokyo-Mitsubishi UFJ. Schluep joined Bank of Tokyo-Mitsubishi UFJ after serving as a derivatives trader at Rabobank from December 2003 until October 2008.
- 828. Paul Robson was suspended by Defendant Bank of Tokyo-Mitsubishi UFJ for his alleged involvement in the manipulation of Yen-LIBOR and the prices of Euroyen-based derivatives. Robson was a former derivatives trader at Defendant Rabobank for eight years (from approximately 2001 through August 2009). As alleged above, Robson was criminally

charged with conspiracy to commit wire fraud and bank fraud, as well as wire fraud, by the DOJ in connection with the manipulation of Yen-LIBOR from May 2006 through early 2011.

829. In August 2012, Defendant Mitsubishi UFJ Financial Group Inc. suspended a third London-based banker who was in charge of submitting Defendant Mitsubishi UFJ Financial Group Inc.'s LIBOR rates.

9. Rabobank

830. On July 27, 2012, *Reuters* reported that Defendant Rabobank fired four of its LIBOR submitters between 2008 and 2011 for their involvement in rate manipulation. The DOJ charged three former Rabobank traders, Paul Robson, Paul Thompson and Tetsuya Motomura with conspiracy to commit wire fraud and bank fraud, as well as wire fraud, all in connection with the manipulation of Yen-LIBOR from May 2006 through early 2011. *See* Ex. D-5. Another former Rabobank Yen derivatives trader, Takayuki Yagami, plead guilty to conspiracy to commit wire fraud and bank fraud for his role in the manipulation of Yen-LIBOR.

10. R.P. Martin

831. Terry Farr and James Gilmour, two former employees of inter-dealer broker R.P. Martin Holdings Ltd., have been arrested by the U.K. Serious Fraud Office and City of London police "in connection with the investigation into the manipulation of LIBOR."

11. ICAP

832. As alleged above, three former ICAP brokers, Darrell Read, Daniel Wilkinson and Colin Goodman have been criminally charged by the DOJ with conspiracy to commit wire fraud and wire fraud in connection with the manipulation of Yen-LIBOR.

12. Tullett Prebon

833. Noel Cryan was dismissed in September 2013 following Tullett Prebon's internal disciplinary hearings for gross misconduct and the manipulation of Yen-LIBOR. Cryan admitted

"he had arranged [the trades]" with UBS. According to Cryan, managers at Tullett Prebon were aware of and encouraged the manipulation.

- 834. Cryan said that Tullett senior managers encouraged him to enter wash trades to generate illicit revenue for Tullett after Tullett saw commissions at a rival broker reach £100,000. One allegedly told him to "get involved."
- 835. Cryan also said that some of the wash trades were conducted after conversations by another Tullett Prebon broker with an RBS trader.

E. The BBA's and JBA's Re-Evaluation of Rate-Setting Process

- 836. The rate-setting manipulation has prompted both the JBA and the BBA to reevaluate the Euroyen TIBOR and Yen-LIBOR rate-setting process.
- 837. In July 2012, the JBA requested that all banks that submit Euroyen TIBOR rates review the status of compliance with the guidelines for the publication of Euroyen TIBOR and is considering reforming the rate-setting process. According to public reports, the JBA is in the process of drafting measures to ensure the legitimacy of Euroyen TIBOR.
- 838. In connection with the JBA's review of the Euroyen TIBOR setting process, the JFSA announced that because "the illegal manipulation of interest rates is an important matter that could undermine trust in the fairness and transparency of the financial market, [the] FSA will also keep a close watch on the JBA's activities with strong consciousness of this matter." The JFSA also reminded market participants that the JFSA "will continue to check individual financial institutions' internal control systems related to the submission of interest rates through inspection and supervision, and if a problem is recognized, [the JFSA] will take appropriate action in light of laws and regulations."

- 839. Remarking on an August 2012 review of allegations of LIBOR-rigging by the FSA, the managing director of the FSA, Martin Wheatley, said that maintaining the current system for setting LIBOR "was not a viable option."
- 840. On September 24, 2012, CFTC Chairman Gary Gensler told a hearing of the European Parliament's Economic and Monetary Affairs Committee that the current rate setting process, in which there was no supervision or overview by regulators, left LIBOR "open to manipulation."
- 841. On September 25, 2012, it was announced that the BBA's governing council voted on September 13 to give up its role in setting LIBOR, reportedly opening the door for government involvement in the rate-setting process.
- 842. On February 25, 2013, the BBA formally voted to relinquish its role in the setting of LIBOR.
- 843. On March 14, 2013, the JBA said that, beginning in April 2013, it would set up a committee of banks and specialists to review the setting of Euroyen TIBOR amid global scrutiny into benchmark lending rates.
- 844. On November 27, 2013, *Reuters* reported that the JFSA convened a twelve member advisory panel to study the credibility of Euroyen TIBOR and other financial indicators.
- a. A few of the advisory panel's proposals included: (a) stripping oversight for setting Euroyen TIBOR from the JBA, (b) shifting responsibility to the JFSA, or (c) setting up a new organization within its ranks to administer Euroyen TIBOR.
- 845. On February 1, 2014, the administration of LIBOR was transferred from the BBA to the Intercontinental Exchange Group ("ICE") to address the need for a new administrator of LIBOR highlighted by the Wheatley review.

846. On May 19, 2014, *The Financial Times*, reported that Mikishi Daimon, an upperhouse member of the Japanese parliament said that banks could still be keeping Euroyen TIBOR artificially high. The *Financial Times* also reported "gaps between Tibor rates and rates in actual interbank transactions" revealing that in the first part of 2014, the actual market rate for three-month funds was .14% whereas three-month Euroyen TIBOR was significantly higher at .215%. The same report also revealed price anomalies in the spread between Yen-LIBOR and Euroyen TIBOR, showing that the average spread was 14 basis points between 2009 and 2012. However, this "gap narrowed sharply in the first three months of 2013" following criminal probes and allegations by former Barclays and Deutsche trader Hideto "Eddy" Takata that Japanese banks were conspiring to keep Euroyen TIBOR artificially high.

VI. A Dramatic Decrease in Variability Between the Quotes Among All Reporting Contributor Bank Defendants Evidences Collusion During The Class Period

- Euroyen TIBOR and Yen-LIBOR Defendant panel banks' quotes began to decline significantly. The decline in volatility and variability accelerated further into the Class Period. This decrease and lack of volatility and variability supports the already revealed evidence of rate-setting collusion among the Contributor Bank Defendants. Dramatic decreases in variability and volatility in rate submissions, especially during times of financial crisis when uncertainty is high, is strongly indicative of collusion. *See* Rosa M. Abrantes-Metz et al., *A Variance Screen for Collusion*, 24 Int'1 J. Ind. Org. 467 (2006); Commission of the European Communities, Commission Staff Working Document, *Implementing the New Methodology for Product Market and Sector Monitoring: Results of a First Sector Screening*, (Nov. 11, 2007).
- 848. Figures 1 and 2 below are Intraday Coefficient of Variation analyses which measure the standard deviation divided by the mean of all daily quotes for Euroyen TIBOR

and/or Yen-LIBOR submitted to the JBA and BBA, respectively. The intraday coefficient of variation analyses measure the variability of the quotes submitted by the Euroyen TIBOR and/or Yen-LIBOR Defendant panel banks, *i.e.*, how different (or how similar) the Contributor Bank Defendants' Euroyen TIBOR and/or Yen-LIBOR daily quotes are from each other on a given day when compared against each other. Figures 1 and 2 below measure all quotes submitted by the Defendant panel banks to the JBA and BBA, respectively ("All Quotes"), including quotes in the compilation of Euroyen TIBOR and Yen-LIBOR rates ("Deciding Quotes").

- 849. Figures 1 and 2 demonstrate that during the pre-Class Period of January 2003 through December 2005, the variability of Euroyen TIBOR and/or Yen-LIBOR quotes submitted by Contributor Bank Defendants was high. Beginning with the start of the Class Period, the variability and volatility among the quotes submitted by Contributor Bank Defendants declined and thereafter declined forcefully and materially, as compared to the period prior to the Class Period.
- 850. For example, on November 14, 2005, the coefficient of variation for Contributor Bank Defendants' Euroyen TIBOR quotes was 0.128 (All Quotes) and 0.0375 across the Deciding Quotes. By contrast, on June 27, 2006, the All-Quote coefficient of variation declined to 0.0262, while the Deciding-Quote coefficient of variation declined to 0.015. Throughout the remainder of the Class Period, the coefficient of variation for Euroyen TIBOR quotes, especially Deciding Quotes, remained significantly and materially lower than the coefficient of variation values that persisted prior to the Class Period.
- 851. The same held true for Yen-LIBOR. For example, on November 14, 2005, the coefficient of variation for Yen-LIBOR quotes was 0.2815 (All Quotes) and 0.0941 across the Deciding Quotes. By contrast, on June 27, 2006, the All-Quote coefficient of variation declined

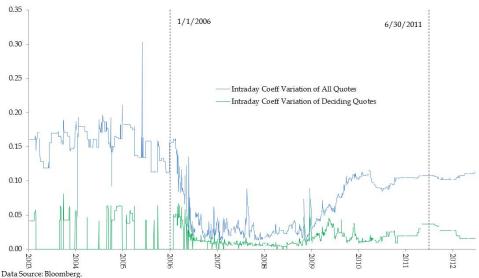
to 0.0547, while the Deciding-Quote coefficient of variation declined to 0.0149. Throughout the remainder of the Class Period, the coefficient of variation for Contributor Bank Defendants' Yen-LIBOR quotes remained significantly and materially below the values that persisted prior to the Class Period.

- 852. Furthermore, the variability and volatility of Contributor Bank Defendants' Euroyen TIBOR and Yen-LIBOR quotes stayed well below their pre-Class Period values during times of severe financial crisis.
- 853. For example, on August 9, 2007, a series of news stories came out representing the "official start" of the financial crisis. This news related to a liquidity and subprime mortgage crisis comprised of several key events, including: (1) a "coordinated intervention" by the European Central Bank, the Federal Reserve Bank, and the Bank of Japan; (2) a warning by AIG that defaults were spreading beyond the subprime sector; and (3) a suspension by BNP Paribas of three funds that held mortgage-backed securities.
- 854. These events, which raised expected borrowing costs and expected interest rates and introduced a high level of financial uncertainty in the market place, should have caused an increase in the coefficient of variation among the Euroyen TIBOR and/or Yen-LIBOR submitted rates. That did not occur. Instead, the coefficient of variation among the quotes submitted by the Contributor Panel Banks remained suspiciously low.
- 855. In particular, on August 7, 2007, the coefficient of variation for the Contributor Panel Banks' Euroyen TIBOR All Quotes and Deciding Quotes was 0.0317 and 0.0111, respectively. On August 14, 2007, these values stood at 0.0357 and 0.0186, and then decreased to 0.0238 and 0.0098 on September 6, 2007. These values further decreased to 0.0167 and 0.0085 on September 12, all during a time of greater economic uncertainty and anxiety. For

Yen-LIBOR, the coefficient of variation for the Yen-LIBOR All-Quotes and Deciding Quotes was 0.0121 and 0.0055, respectively, on August 8, 2007. These values remained substantially the same throughout August 2007, for example standing at 0.0178 and 0.005 on August 13, 2007 and 0.0258 and 0.0158 on August 14, 2007, again all during a time of great economic uncertainty and anxiety in which these values should have increased considerably.

856. With the fall of Lehman Brothers in September 2008, the default risk of the Defendant panel banks significantly increased, not only because each became more likely to default due to severely impaired financial conditions, but also because of systemic risk (the risk of collapse of the overall financial system). Yet such drastic financial changes were not reflected in an increased variability of Contributor Panel Banks' Euroyen TIBOR and/or Yen-LIBOR quotes. Instead, the coefficient of variation for the Euroyen TIBOR and/or Yen-LIBOR quotes remained suspiciously low and unresponsive to Lehman's collapse. For example, on September 11, 2008, the coefficient of variation for the Euroyen TIBOR and Yen-LIBOR Deciding Quotes was 0.0094 and 0.0127, respectively. On September 18, 2008, following the collapse of Lehman, these values actually decreased to 0.0091 and almost zero, respectively, and when considering all of the quotes these values were 0.22 and 0.017 for Euroyen TIBOR and Yen-LIBOR, respectively. *See* Figures 1 and 2 below.

Intraday Coefficient of Variation of Contributing Bank Quotes 3 Month EuroYen TIBOR

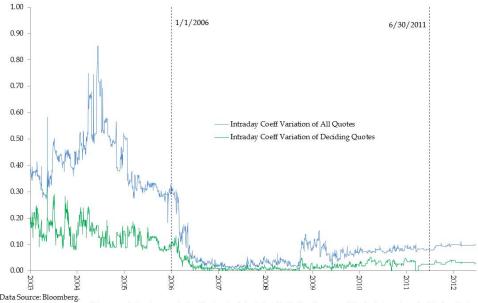


Data Source: Bloomberg.

Note: The coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The deciding group of quotes corresponds to those quotes which effectively entered into the calculation of the TIBOR on each given day.

FIGURE 2

Intraday Coefficient of Variation of Contributing Bank Quotes 3 Month Yen LIBOR

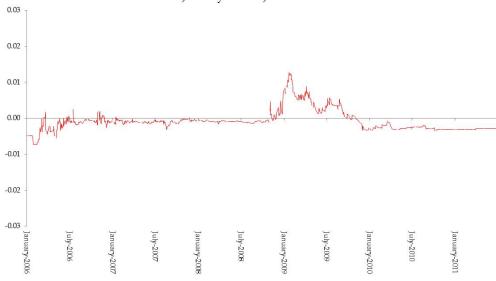


Data Source: Bloomberg,
Note: The coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The deciding group of quotes corresponds to those quotes which effectively entered into the calculation of the LIBOR on each given day.

- Bank who has not yet settled for its part in the conspiracy. This economic evidence reveals that each such Defendant's rate submissions to the Euroyen TIBOR and Yen-LIBOR panels lowered the collective coefficient of variation of all panel banks. That their contribution reduced the coefficient of variation provides strong economic indicia that these Defendants participated in collusive rate setting during the Class Period. For each such Contributor Panel Bank, Plaintiffs' economic analyses compared the difference between the intraday coefficient of variation for all of the Contributor Panel Bank quotes to the same measure when excluding one particular bank at a time, call it, Bank A. Where the comparator coefficient of variation is zero, adding Bank A's quote keeps the intraday coefficient of variation for all of the quotes at the same value. This result is evidence that Bank A behaved in accordance with the conspiracy by quoting rates equivalent to those of the colluding banks. The results of this analysis for these Contributor Panel Banks are shown in Figures 3-25, below.
- 858. When this comparison results in a negative value, the intraday coefficient of variation for all quotes excluding Bank A is larger than the intraday coefficient of variation for all of the quotes. Stated differently, when the quote for Bank A is added, the coefficient of variation is reduced, *i.e.*, the bank's rate submissions reduce the overall quote variability. This result is consistent with Bank A being part of the collusion that has been demonstrated by the economic and non-economic evidence described above.
- 859. From a statistical perspective, these individual studies of each Contributor Panel Bank yield results that are inconsistent with independent action during the Class Period, given the reduced variation and unresponsiveness to various relevant market events. This evidence strongly suggests that each of these Contributing Panel Banks acted in a coordinated matter.

Contribution of Bank of Tokyo-Mitsubishi to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

January 2006 -- June 2011

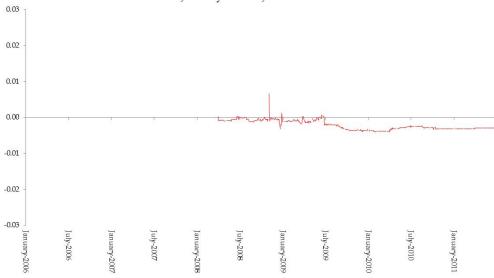


Notes: The series represents the Intraday Coefficient of Variation for all quotes minus the Intraday Coefficient of Variation for all quotes excluding Bank of Tokyo-Mitsubishi. The coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The Coefficient of Variation for all quotes excluding Bank of Tokyo-Mitsubishi is computed similarly but excludes Bank of Tokyo-Mitsubishi's quotes.

FIGURE 4

Contribution of Bank of Yokohama to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

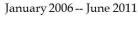
January 2006 -- June 2011

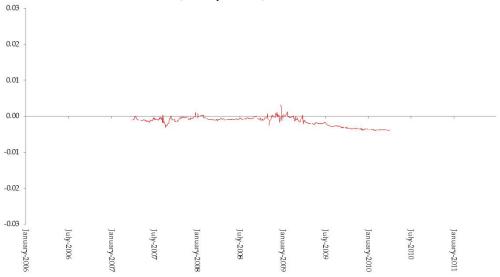


Data Source: Bloomberg.

Notes: The series represents the Intraday Coefficient of Variation for all quotes minus the Intraday Coefficient of Variation for all quotes excluding Bank of Yokohama. The coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The Coefficient of Variation for all quotes excluding Bank of Yokohama is computed similarly but excludes Bank of Yokohama's quotes.

Contribution of Chuo Mitsui Trust to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes



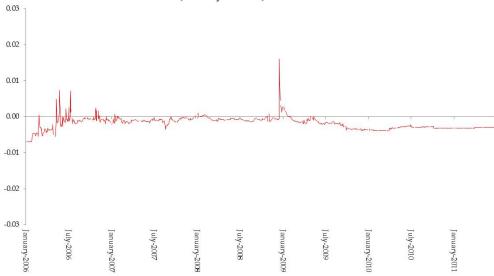


Data Source: Bloomberg.
Notes: The series represents the Intraday Coefficient of Variation for all quotes minus the Intraday Coefficient of Variation for all quotes excluding Chuo Mitsui Trust. The coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The Coefficient of Variation for all quotes excluding Chuo Mitsui Trust is computed similarly but excludes Chuo Mitsui Trust's quotes.

FIGURE 6

Contribution of Mitsubishi UFJ Trust to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

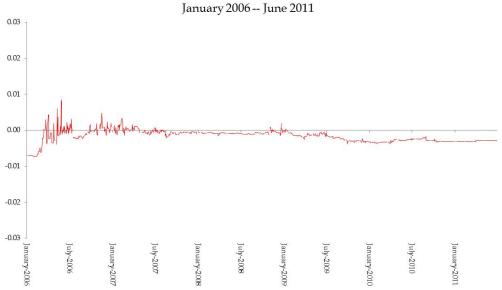
January 2006 -- June 2011



Data Source: Bloomberg.

Notes: The series represents the Intraday Coefficient of Variation for all quotes minus the Intraday Coefficient of Variation for all quotes excluding Mitsubishi UFJ
Trust. The coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The Coefficient
of Variation for all quotes excluding Mitsubishi UFJ Trust is computed similarly but excludes Mitsubishi UFJ Trust's quotes.

Contribution of Mizuho Bank to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes



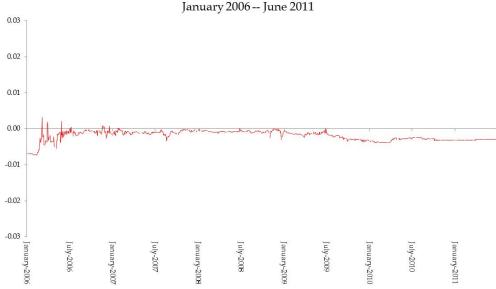
Data Source: Bloomberg.

Data Source. Indicationers,

Notes: The series represents the Intraday Coefficient of Variation for all quotes minus the Intraday Coefficient of Variation for all quotes excluding Mizuho Bank. The coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The Coefficient of Variation for all quotes excluding Mizuho Bank is computed similarly but excludes Mizuho Bank's quotes.

FIGURE 8

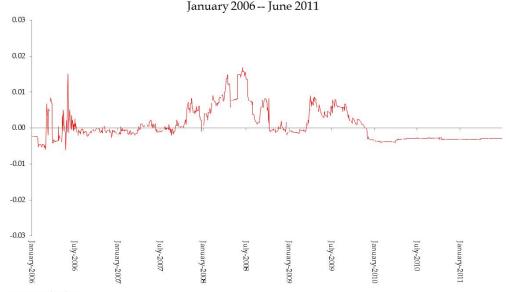
Contribution of Mizuho Corporate Bank to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes



Data Source: Bloomberg.

Notes: The series represents the Intraday Coefficient of Variation for all quotes minus the Intraday Coefficient of Variation for all quotes excluding Mizuho Corporate Bank. The coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The Coefficient of Variation for all quotes excluding Mizuho Corporate Bank is computed similarly but excludes Mizuho Corporate Bank's quotes.

Contribution of Mizuho Trust & Banking to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

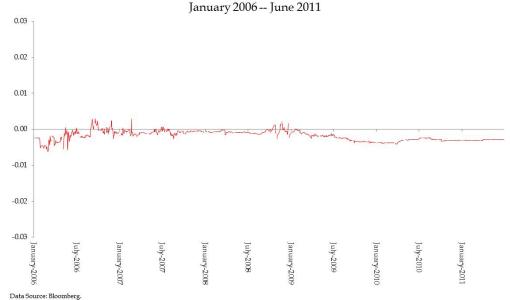


Data Source: Bloomberg.

Notes: The series represents the Intraday Coefficient of Variation for all quotes minus the Intraday Coefficient of Variation for all quotes excluding Mizuho Trust & Banking, The Coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The Coefficient of Variation for all quotes excluding Mizuho Trust & Banking is computed similarly but excludes Mizuho Trust & Banking's quotes.

FIGURE 10

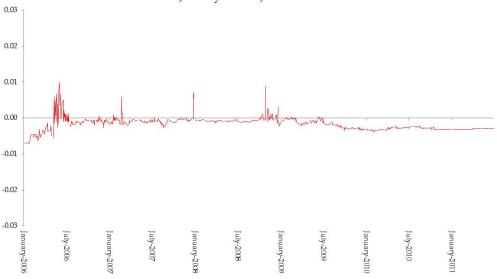
Contribution of Norinchukin Bank to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes



Notes: The series represents the Intraday Coefficient of Variation for all quotes minus the Intraday Coefficient of Variation for all quotes excluding Norinchukin Bank. The coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The Coefficient of Variation for all quotes excluding Norinchukin Bank is computed similarly but excludes Norinchukin Bank's quotes.

Contribution of Resona Bank to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

January 2006 -- June 2011



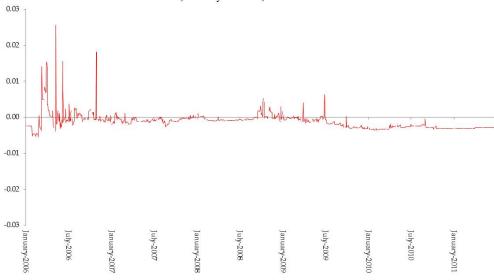
Data Source: Bloomberg.

Notes: The series represents the Intraday Coefficient of Variation for all quotes minus the Intraday Coefficient of Variation for all quotes excluding Resona Bank. The coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The Coefficient of Variation for all quotes excluding Resona Bank is computed similarly but excludes Resona Bank's quotes.

FIGURE 12

Contribution of Shinkin Central Bank to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

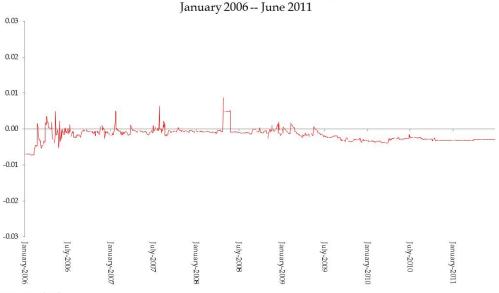
January 2006 -- June 2011



Data Source: Bloomberg.

Notes: The series represents the Intraday Coefficient of Variation for all quotes minus the Intraday Coefficient of Variation for all quotes excluding Shinkin Central Bank. The coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The Coefficient of Variation for all quotes excluding Shinkin Central Bank is computed similarly but excludes Shinkin Central Bank's quotes.

Contribution of Shoko Chukin Bank to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

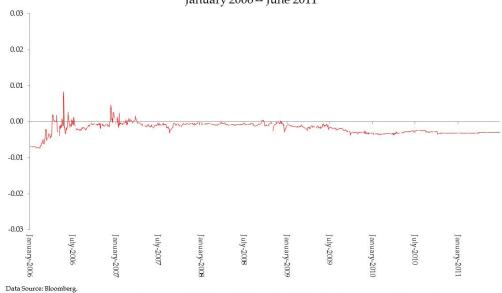


Data Source: Bloomberg.

Notes: The series represents the Intraday Coefficient of Variation for all quotes minus the Intraday Coefficient of Variation for all quotes excluding Shoko Chukin Bank. The coefficient of variation on each day is computed as the standard deviation divided by the mean of the bank's quotes submitted on that day. The Coefficient of Variation for all quotes excluding Shoko Chukin Bank is computed similarly but excludes Shoko Chukin Bank's quotes.

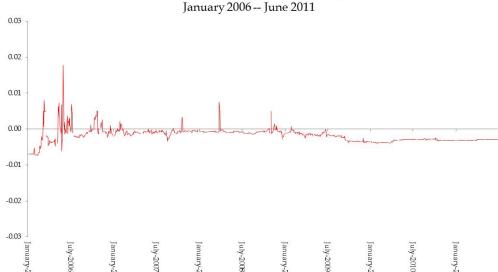
FIGURE 14

Contribution of Sumitomo Mitsui Banking Corp to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes January 2006 -- June 2011



Notes: The series represents the Intraday Coefficient of Variation for all quotes minus the Intraday Coefficient of Variation for all quotes excluding Sumitomo Mitsui Banking Corp. The coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The Coefficient of Variation for all quotes excluding Sumitomo Mitsui Banking Corp is computed similarly but excludes Sumitomo Mitsui Banking Corp/s quotes.

Contribution of Sumitomo Trust & Banking to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes



Data Source: Bloomberg.

Notes: The series represents the Intraday Coefficient of Variation for all quotes minus the Intraday Coefficient of Variation for all quotes excluding Sumitomo Trust & Banking. The coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The Coefficient of Variation for all quotes excluding Sumitomo Trust & Banking is computed similarly but excludes Sumitomo Trust & Banking's quotes.

FIGURE 16

Contribution of Bank of Tokyo-Mitsubishi to the Intraday Coefficient of Variation of 3 Month Yen LIBOR Quotes January 2006 -- June 2011

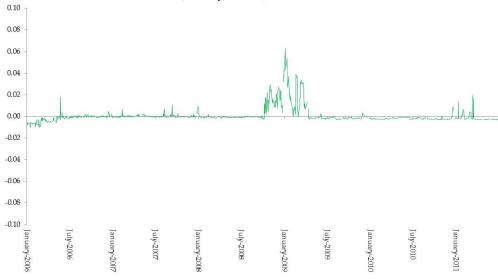
0.00 - 0.

Data Source: Biodineers.

Notes: The series represents the Intraday Coefficient of Variation for all quotes minus the Intraday Coefficient of Variation for all quotes excluding Bank of Tokyo-Mitsubishi. The coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The Coefficient of Variation for all quotes excluding Bank of Tokyo-Mitsubishi is computed similarly but excludes Bank of Tokyo-Mitsubishi's quotes.

Contribution of Barclays to the Intraday Coefficient of Variation of 3 Month Yen LIBOR Quotes

January 2006 -- June 2011



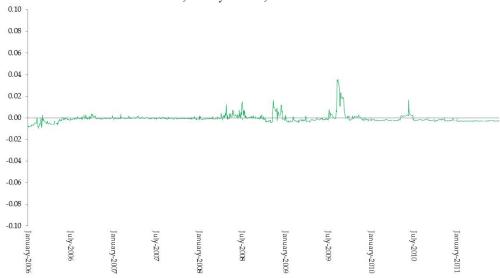
Data Source: Bloomberg.

Notes: The series represents the Intraday Coefficient of Variation for all quotes minus the Intraday Coefficient of Variation for all quotes excluding Barclays. The coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The Coefficient of Variation for all quotes excluding Barclays is computed similarly but excludes Barclays' quotes.

FIGURE 18

Contribution of HSBC to the Intraday Coefficient of Variation of 3 Month Yen LIBOR Quotes

January 2006 -- June 2011



Notes: The series represents the Intraday Coefficient of Variation for all quotes minus the Intraday Coefficient of Variation for all quotes excluding HSBC. The coefficient of variation on each day is computed as the standard deviation divided by the mean of the banks' quotes submitted on that day. The Coefficient of Variation for all quotes excluding HSBC is computed similarly but excludes HSBC's quotes.